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Office national de l'énergie

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National Energy Board

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20 March 2006

The Honourable Gary Lunn, P.C., M.P.
Minister of Natural Resources
580 Booth Street, 21st Floor
Ottawa, Ontario
K1A 0E4

Dear Minister:

Annual Report 2005

I am pleased to submit the Annual Report of the National Energy Board for the year ending 31 December 2005, in accordance with the provisions of Section 133 of the *National Energy Board Act*, R.S.C. 1985, c. N-7.

Yours truly,

Kenneth W. Vollman
Chairman

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OUR PURPOSE

We promote safety and security, environmental protection, and economic efficiency in the Canadian public interest within the mandate set by Parliament in the regulation of pipelines, energy development and trade

OUR VISION

To be a respected leader in energy regulation that protects and enables in the Canadian public interest.

OUR GOALS

NEB-regulated facilities and activities are safe and secure, and are perceived to be so.

NEB-regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected.

Canadians derive the benefits of economic efficiency.

The NEB fulfills its mandate with the benefit of effective public engagement.

The NEB fulfills its mandate with the benefit of effective leadership and quality management of affected processes.

CHAIRMAN'S LETTER

In 2005, energy prices reached unprecedented highs. The impact of significant crude oil demand growth, limited spare oil production and refining capacity, and the hurricanes in the United States Gulf Coast saw oil prices rise to US$71 per barrel and average well above $50 for the year. Similarly, natural gas prices more than doubled in many Canadian and U.S. markets, driven by rising crude oil prices, hurricane-related supply disruptions, and increased gas-fired electricity demand caused by hot summer weather. Given the long-term nature of some of these factors, a new era of tight and volatile energy markets is expected.

Canadian energy supply is responding to the changes in the global market. Driven by higher crude oil and natural gas prices, in 2005 producers drilled a record 25 000 wells. Although natural gas production from conventional reserves in the Western Canada Sedimentary Basin has peaked, approximately 3 000 wells targeting coal bed methane (natural gas from coal) were drilled, reflecting a growing interest in developing non-conventional resources. High natural gas prices have also supported interest in developing supplies from Canada's North. Approximately 5 000 oil wells were drilled in 2005, including wells related to Alberta oil sands activity. Activity related to Alberta's oil sands and offshore eastern Canada is expected to lead to increases in crude oil supply.

Electricity generation remains adequate in most provinces, although Ontario is facing challenges as it seeks to replace its older coal-fired units with cleaner sources. With respect to transmission, the blackout that hit Ontario and parts of northeastern United States in August 2003 has led to innovative and far-reaching initiatives to improve reliability. The United States *Energy Policy Act*, signed in August 2005, provides legislation to implement mandatory electricity reliability standards in the United States. Due to the interconnected nature of the bulk power system, which improves the reliability of supply for both countries, these standards will also have implications for the power grid in Canada. The *Energy Policy Act* also provides for the creation of the U.S. Electricity Reliability Organization (ERO), which is expected to be given responsibility for the implementation of the standards. The ERO is also expected to seek recognition of its role from regulatory authorities in Canada and Mexico.

The year 2005 saw development of many new infrastructure proposals. These include proposals to deliver growing oil sands production to market, to connect Canada's frontier natural gas reserves and to strengthen electric power interties with the United States. Hearings on some of these proposals are expected to occur in 2006. In assessing those proposals that fall within its mandate, the NEB is charged with enabling the development of desirable infrastructure while protecting all relevant public interests.

In 2005, the Board continued its commitment to provide clear regulatory rules and efficient and effective processes. This allows projects found to be in the public interest to proceed in a timely manner and, on an ongoing basis, removing unnecessary regulatory costs. Highlights include:

- preparation for review of the Mackenzie Gas Project applications;
- the implementation of performance standards including regulatory targets and timeliness for some of the Board's regulatory functions, such as the release of hearing decisions; export/import authorizations, and non-hearing section 58 applications;
- preparation for a Liquefied Natural Gas (LNG) filing and hosting an LNG Safety Workshop in co-operation with the Nova Scotia Department of Energy; and
- the evaluation of the Board's regulatory functions in the north.

To further support its efforts towards efficient and effective regulatory processes, the Board is working cooperatively with other agencies to coordinate and streamline regulatory processes, develop guidelines for processing times, and reach out to public interest groups. Given the number of decision-making agencies with specific mandates for energy projects, co-ordination and streamlining remain a significant challenge.

Another challenge is the Board's obligation and role with respect to consultation with Aboriginal peoples on major energy infrastructure projects. In 2005, the NEB initiated a Northern Engagement Research Project to improve its public engagement approaches, including those with Aboriginal communities. The intent is to improve responsiveness to the concerns of local communities, improve information sharing, and to enhance the value of stakeholder contributions.

In 2005, the NEB continued to monitor energy markets and, in light of the high and volatile energy prices, increased its efforts to publish information on the state of energy supplies, markets and prices in Canada. In 2005, the Board produced five Energy Market Assessments and released a report on the Canadian hydrocarbon transportation system that provided an assessment of how Canadian energy transportation systems are currently functioning.

Although many of the Board's efforts to improve its performance focused on interactions with outside parties, during 2005 the NEB invested significant effort to improve internal processes. Examples include creating an organizational culture that is more operationally focused, developing a Quality Management System, investing in leadership development for many Board staff, and continuing development and implementation of service standards. Attracting and retaining qualified and experienced people in an extremely competitive labour market in Calgary continues to be a significant challenge for the Board.

While there are many challenges before us, the Board is firmly committed to fulfilling its role in a manner that will help ensure that Canadians' future energy needs are met in a safe and secure manner while protecting the integrity of the environment and respecting the rights of affected citizens.

OUR ROLE AND RESPONSIBILITIES

ABOUT THE NEB

The National Energy Board (NEB or the Board) is an independent federal agency established in 1959. It regulates several aspects of Canada's energy industry. Its purpose is to promote safety and security, environmental protection and economic efficiency in the Canadian public interest within the mandate set by Parliament for the regulation of pipelines, energy development and trade. The Board reports to Parliament through the Minister of Natural Resources.

"The NEB's corporate purpose is to promote safety and security, environmental protection and economic efficiency in the Canadian public interest[1] within the mandate set by Parliament in the regulation of pipelines, energy development and trade."

The main functions of the NEB are established in the *National Energy Board Act* (NEB Act) and include regulating:

- the construction and operation of pipelines that cross international or provincial borders, as well as pipeline tolls and tariffs;
- international power lines and designated interprovincial power lines; and
- natural gas imports and exports, oil, natural gas liquids (NGLs) and electricity exports, and some oil and gas exploration on frontier[2] lands, particularly in Canada's North and certain offshore areas.

The NEB Act also requires that the Board monitor all aspects of energy supply, production, development and trade that fall within the jurisdiction of the federal government.

The NEB regulates approximately 45 000 kilometres of pipelines across Canada (Figures 1 and 2). These include large diameter high-pressure natural gas pipelines, crude oil and oil products pipelines, shorter small-diameter pipelines, and one carbon dioxide pipeline. In 2005, these pipelines transported over $100 billion of crude oil, petroleum products, natural gas liquids and natural gas. In 2005, it is estimated that the cost of providing transportation services for these commodities was roughly $4.5 billion.

The Board has additional regulatory responsibilities under the *Canada Oil and Gas Operations Act* (COGO Act) and under certain provisions of the *Canada Petroleum*

1. The public interest is inclusive of all Canadians and refers to a balance of economic, environmental, and social interests that changes as society's values and preferences evolve over time. As a regulator, the Board must estimate the overall public good a project may create and its potential negative aspects, weigh its various impacts, and make a decision.
2. Those lands in the North and in offshore areas that are not subject to a federal/provincial shared management agreement.

FIGURE 1
MAJOR GAS PIPELINES IN CANADA

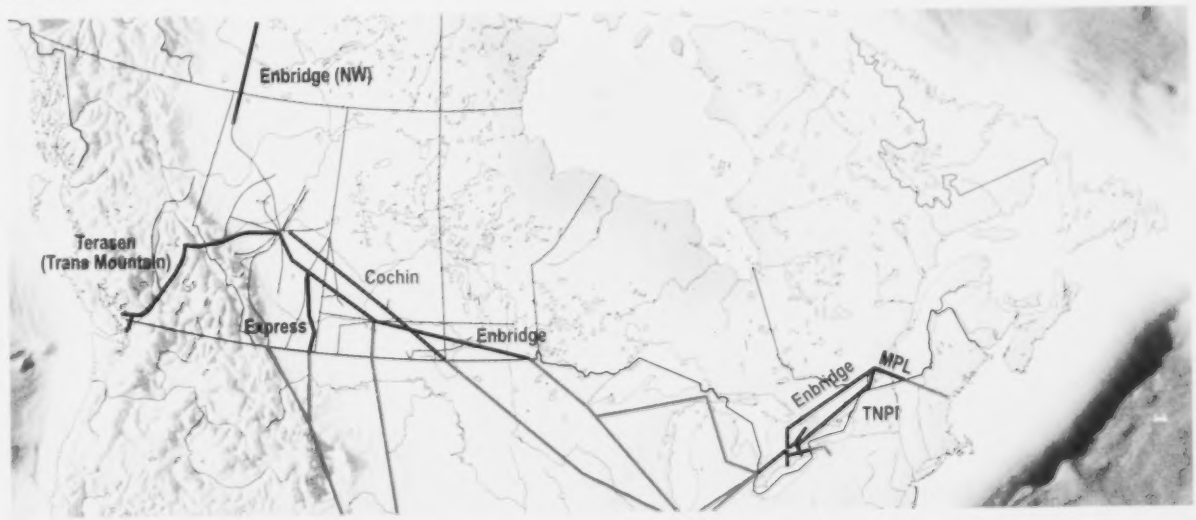
FIGURE 2
MAJOR OIL PIPELINES IN CANADA

Resources Act (CPR Act) for oil and gas exploration and production on frontier lands and certain offshore areas (Figure 3).

The Board also has environmental responsibilities under the *Canadian Environmental Assessment Act* (CEA Act) and the *Mackenzie Valley Resource Management Act*.

FIGURE 1
MAJOR GAS PIPELINES IN CANADA

FIGURE 2
MAJOR OIL PIPELINES IN CANADA



Resources Act (CPR Act) for oil and gas exploration and production on frontier lands and certain offshore areas (Figure 3).

The Board also has environmental responsibilities under the *Canadian Environmental Assessment Act* (CEA Act) and the *Mackenzie Valley Resource Management Act.*

In addition, certain Board inspectors are appointed Health and Safety Officers by the Minister of Labour to administer Part II of the *Canada Labour Code* as it applies to facilities and activities regulated by the Board.

In addition to its regulatory responsibilities, the NEB provides energy information and expert advice by collecting and analyzing information about Canadian energy markets. The NEB's mandate also includes providing expert technical advice to the Canada-Newfoundland Offshore Petroleum Board (C-NOPB), the Canada-Nova Scotia Offshore Petroleum Board (C-NSOPB), Natural Resources Canada (NRCan), and Indian and Northern Affairs Canada (INAC).

The NEB may, on its own initiative, hold inquiries and study specific energy matters and prepare reports for Parliament, the federal government and the general public. On request, the NEB provides advice to the Minister of Natural Resources Canada and other government ministers, departments and agencies.

The NEB is a court of record and has the powers of a superior court to compel attendance at hearings, examine witnesses under oath, inspect documents and enforce its orders. The NEB Act provides for up to nine permanent Board M nbers assisted by staff including financial and market analysts, environmental specialists, economists, engineers, geologists, geophysicists and lawyers. Public hearings are typically conducted by three Board Members, who constitute a quorum, with one acting as the Presiding Member. The Board's regulatory decisions and the reasons for them are issued as public documents.

More information on the background and operations of the NEB may be found at the Board's Internet site, www.neb-one.gc.ca. For a complete list of the legislation under which the NEB has named responsibility, see Supplement I.

FIGURE 3
FRONTIER ADMINISTRATIVE AREAS

REGULATORY ACTIVITY IN 2005

In 2005, the NEB considered applications for new pipeline facilities, a detailed route hearing, tolls and tariffs filings, activities on frontier lands, and requests for changes to short-term export and import orders. The Board continued to monitor, assess and enforce compliance within the regulated industry through a comprehensive program of inspections and audits. The NEB also prepared reports on current and future energy market developments in Canada. These activities are summarized below:

Certificates, Orders, Permits and Applications Approved in 2005

- 657 Certificates, Orders, Permits and Letter Approvals

Construction and Operation of Pipelines and Power Lines under Parts III and III.1 of the NEB Act

- 104 Orders and Permits

Pipeline Tolls and Tariffs under Part IV of the NEB Act

- 33 Orders

Exports and Imports of Natural Gas, Crude Oil, Natural Gas Liquids and Electricity under Part VI of the NEB Act

- 423 Orders and Permits

Exploration and Production Activity in Frontier Areas under the COGO Act

- 53 applications approved

Activity in Frontier Areas under the CPR Act

- 8 Significant Discovery Declarations

Proceedings

- 6 public hearings
- 22 public hearing days
- 1 Pre-Hearing Planning Conference for the Mackenzie Gas Project

Compliance Monitoring

- 18 inspections undertaken during construction
- 92 inspections of operating pipelines and facilities
- 1 management system audit

Landowner Complaint Resolution Program

- 20 landowner files considered

Publications Providing Energy Market Information

- *Alberta's Ultimate Potential for Conventional Natural Gas* (March 2005)
- *Outlook for Electricity Markets 2005-2006* (June 2005)
- *Canadian Hydrocarbon Transportation System: Transportation Assessment* (August 2005)
- *Short-term Outlook for Canadian Crude Oil to 2006* (September 2005)
- *Short-term Canadian Natural Gas Deliverability 2005-2007* (October 2005)
- *Short-term Outlook for Natural Gas and Natural Gas Liquids to 2006* (October 2005)

IMPROVING THE REGULATORY FRAMEWORK

In 2005, the NEB continued to pursue its regulatory strategy, which is based on goal-oriented regulation[3], clear and predictable regulatory processes, and effective co-operation and partnership with government agencies and departments. These efforts support the principles of the Government of Canada's Smart Regulation strategy. The NEB participated in several initiatives related to the Smart Regulation strategy including:

- the Public Sector Council on Regulatory Management, which advances the best regulatory practices in the Canadian government through regular meetings and a learning network;
- making submissions to the Smart Regulation Report on Actions and Plans, which reports twice a year on the progress of Smart Regulation initiatives. Initiatives included in this report involve offshore and frontier regulatory reform, and recently included NEB work on regulations and the co-operation plan for the environmental impact assessment of a northern gas pipeline project; and
- the Environmental Sustainability Theme Table which is focused on developing a common approach to regulation to support a rich and sustainable natural environment for Canadians.

JUNE 2005 WORKSHOP

In June 2005, the NEB held its third workshop, "Collaborating for Regulatory Improvement". The workshop attracted over 350 participants representing more than 108 organizations including industry; municipal, provincial and federal agencies; consultants; and Aboriginal groups. The workshop was an opportunity for the NEB to share information and to engage stakeholders on regulatory initiatives and internal improvement initiatives, environmental protection, and the management of safety, integrity, emergency and security.

At the workshop, participants continued to demonstrate support for the NEB's regulatory strategy including goal oriented regulations. Workshop proceedings can be found on the NEB Internet site at www.neb-one.gc.ca/Publications/NEBWorkshops/2005NEBWorkshopProceedings_e.pdf.

HEALTH, SAFETY AND ENVIRONMENT CASE

During 2005, the NEB introduced the "Health, Safety and Environment (HSE) Case" regulatory approach for the proposed *Submerged Pipeline Regulations*. The HSE Case regulatory approach is modeled on international offshore regulatory regimes. The regulatory approach is built on a framework of management systems, hazard identification, risk management and third party verification. The HSE Case itself is a set of summary documents prepared by a company that address this framework. The Board will continue to build on the progress made on the *Submerged Pipeline Regulations* in 2006.

REGULATORY ADDITIONS AND UPDATES

The NEB continued working with the Department of Justice on final details of the new *Damage Prevention Regulations* and the updated *Canada Oil and Gas Diving Regulations* in preparation for the regulations being published for comment in Part I of the *Canada Gazette*.

The NEB continued the development and maintenance of regulations regarding exploration and development activities under the COGO Act. The regulations, developed in cooperation with NRCan, the INAC, the C-NOPB, the C-NSOPB, the Nova Scotia Department of Energy and the Newfoundland Department of Natural Resources, ensure common regulatory approaches for activities in the offshore regions, the Northwest Territories and Nunavut.

3. The NEB's goal-oriented regulations are a blend of prescriptive, performance based and goal-oriented regulations supported by standards and non-mandatory guidance notes. Goal-oriented regulations promote increased industry responsibility and flexibility in meeting NEB regulatory requirements.

NEB ELECTRICITY COST RECOVERY WORKSHOP

In March 2004, the Board initiated the Electricity Cost Recovery project as a result of the electricity industry expressing concern about the cost recovery process. The electricity industry members believed that the current methodology was not equitable, since exporters were the only group paying the NEB costs. These members also believed that the restructuring of the industry resulting in the separation of generation, transmission, distribution and marketing functions meant that it was even more important to have the costs more appropriately distributed. In 2004, the Board held a one-day workshop in Calgary to explore the issue further with industry participants. A second workshop was held on 2 June 2005 in Montreal at which time Board staff provided additional background information and presented some draft options and criteria for industry's input and feedback. A workshop summary can be found on the NEB Internet site at www.neb-one.gc.ca/ActsRegulations/NEBAct/ElectricityCostRecovery/2004/index_e.htm.

As a result of the workshops and stakeholder consultation, the NEB developed a new electricity cost recovery concept. This concept, with further consultations, will provide the basis for drafting modifications to the *National Energy Board Cost Recovery Regulations.* In 2006, the Board is holding an information session to present the electricity cost recovery concept. Further details are available in the Effective Leadership and Management section of this report.

INDUSTRY STANDARDS

The NEB continues to participate with industry, government and stakeholder groups in several initiatives to develop consensus-based standards, best practices and common approaches to safety, security and environmental issues. As part of this work, the NEB sits on several technical committees that develop and update the Canadian Standards Association (CSA) pipeline standards. The NEB is also a member of the Canadian Pipeline Environment Committee and the Canadian Association of Members of Public Utility Tribunals.

APPLICATION HIGHLIGHTS

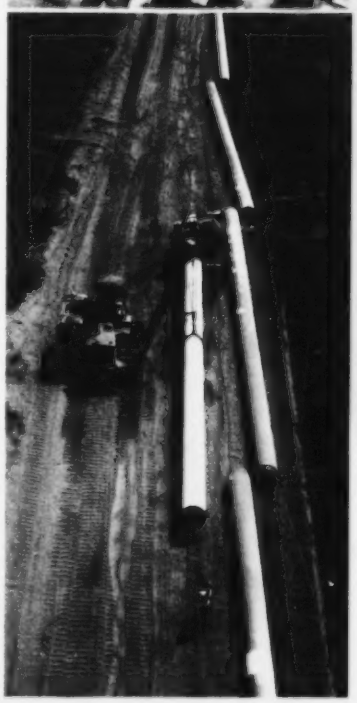
In 2005, the NEB considered applications for new pipeline facilities, for changes to tolls and tariffs, activities on Canada's non-accord lands, for short-term exports orders for oil, NGLs and natural gas, and for export permits for electricity. The Board also held a detailed route hearing to finalize the route for a previously approved international power line. Board resources were also devoted to preparing for an expected hearing for the Mackenzie Gas Project and preparing for potential infrastructure requirements related to liquefied natural gas (LNG) imports.

"The NEB's vision is to be a respected leader in energy regulation that protects and enables in the canadian public interest."

PIPELINE FACILITIES

Mackenzie Gas Project Hearing Preparations

In October 2004, the NEB received five applications from Imperial Oil Resources Ventures Limited (IORVL), Mackenzie Valley Aboriginal Pipeline Limited Partnership, Imperial Oil Resources Limited, ConocoPhillips Canada (North) Limited, ExxonMobil Canada Properties and Shell Canada Limited for the construction and operation of the Mackenzie Gas Project in northern Canada. Project updates were subsequently filed in November and December 2005.



Imperial Oil applied for approval to build a 192-kilometre (km) (119 miles) gas gathering system to collect the gas from three fields and deliver it to a processing facility near Inuvik. At the processing facility, NGLs would be separated out. The natural gas would enter the proposed 1 194 km (742 miles) pipeline and the liquids would enter a smaller, parallel pipeline of about 459 km (285 miles) that would connect to the Enbridge Pipelines (NW) Inc. pipeline at Norman Wells. The project includes Development Plan Applications for the Taglu, Parsons Lake and Niglintgak onshore natural gas fields, operated by Imperial Oil, ConocoPhillips and Shell Canada, respectively.

The 762 millimetre (mm) (30 inch) natural gas transmission pipeline is designed to transport an average of 34 million cubic metres (1.2 billion cubic feet) per day. The capital cost of the Mackenzie Gas Project is estimated at over $7 billion. It is planned to be in operation by the end of 2011.

Throughout 2005, the Board held information sessions in many communities along the Mackenzie Valley and in other communities in the Northwest Territories and northern Alberta. These sessions provided participants with an opportunity to learn about the NEB's hearing process and to express their views. In June 2005, the Board also viewed the geographical and physical features of the proposed anchor fields and pipeline route by helicopter.

During the first half of 2005, the Board continued its examination of the applications. On 7 July 2005, the Board asked IORVL to provide a date by which

it would inform the Board of its readiness for a public hearing. On 23 November 2005, IORVL informed the Board that it was ready to proceed to public hearings. In December 2005, the Board held a pre-hearing planning conference in Inuvik, Yellowknife, Fort Good Hope and Fort Simpson. In addition to participating in discussions, participants were able to provide written and phone-in comments. Following the planning conference, the Board released a draft schedule for its public hearing that started in Inuvik on 25 January 2006.

The NEB hearing process is coordinated with the Environmental Impact Review of the Mackenzie Gas Project by the Joint Review Panel, as contemplated in the "Cooperation Plan for the Environmental Impact Assessment and Regulatory Review of a Northern Gas Pipeline Project through the Northwest Territories", dated June 2002. An NEB Board Member was appointed as a member of the Joint Review Panel. Under Authorization MO-13-2004 the Board Member is authorized in accordance with the provisions of subsection 15(1) of the NEB Act to report and make recommendations to the NEB Panel in its consideration of the Mackenzie Gas Project.

Throughout 2005 the NEB continued to support the work of the Northern Gas Project Secretariat (NGPS). The NGPS is based in Yellowknife, with regional offices in Inuvik, Norman Wells and Fort Simpson. The NGPS provides the forum through which agencies responsible for the environmental and regulatory assessment of the Mackenzie Gas Project can develop cooperative and harmonized approaches, while respecting the need for the review processes to be conducted independently. The NGPS mandate includes supporting and coordinating the public hearing processes, involving all aspects related to public involvement. The work of the NGPS is overseen by an Executive Committee composed of the Sitting Chairs of the Joint Review Panel, the NEB Panel, the Mackenzie Valley Land and Water Board and the Northwest Territories Water Board. The Executive Committee is chaired by the NEB.

Kinder Morgan Canada (formerly Terasen Pipelines (Trans Mountain) Inc.)

In 2005, Kinder Morgan Canada (formerly Terasen Pipelines (Trans Mountain) Inc.) received approval from the NEB to increase the capacity of the Trans Mountain pipeline system from 35 000 m^3/d to 41 000 m^3/d. The project includes modifications of three existing pump stations and the construction of seven new stations on existing lands owned by Kinder Morgan Canada. It also includes modifications of pump internals at eight existing stations to improve efficiencies under the new operation conditions. On 21 December 2005, Terasen Pipelines (Trans Mountain) Inc. filed an application to vary the project design.

TOLLS AND TARIFFS

TransCanada Pipeline Limited

RH-2-2004 Phase II

The Board considered the cost of capital aspects of TransCanada's Mainline 2004 Tolls and Tariff Application during Phase II of the RH-2-2004 public hearing. In April 2005, the Board approved an increase in the TransCanada Mainline's deemed common equity ratio from 33 to 36 percent to be effective 1 January 2004. In the Phase II Decision the Board concluded that, overall, the business risk to which the Mainline is exposed has increased since the last assessment of TransCanada's cost of capital in the RH-4-2001 Hearing as a result of increases in supply risk and competitive risk. Further, the Board concluded that an increase in TransCanada's deemed common equity ratio was warranted in order to ensure that the Mainline continues to maintain its financial integrity and its ability to attract capital on reasonable terms and conditions. All other aspects of the 2004 Tolls and Tariff Application were heard during Phase I of the public hearing and the Board rendered its decision on that phase of the hearing in September 2004.

RH-R-1-2005

In November 2004, the Canadian Association of Petroleum Producers (CAPP) applied for a review of the

Board's RH-2-2004 Phase I Decision which was released in September 2004. The review was on the basis that the Board committed errors with respect to:

i) Non-Renewable Firm Transportation (FT-NR);

ii) long-term incentive compensation (LTIC); and

iii) regulatory costs.

On 13 April 2005, CAPP withdrew its request for a review of LTIC costs. In May 2005, the Board released its RH-R-1-2005 Decision. In the decision, the Board overturned its Phase I Decision authorizing FT-NR to be tolled on a biddable basis and instead approved the tolling of FT-NR service on the same basis as FT with a step-down. However, the Board was of the view that CAPP did not raise a doubt as to the correctness of the regulatory costs approved in the Phase I Decision.

RH-R-2-2005

In January 2005, Coral Energy Canada Inc. (Coral) and the Cogenerators Alliance (CA) applied for a review and variance of the Board's RH-2-2004 Phase I Decision on the grounds that the Board erred by inappropriately shifting the burden of proof onto intervenors and by failing to provide adequate reasons for its decisions. In May 2005, the Board released its RH-R-2-2005 Decision. The Board found that the burden of proof ground did not raise a doubt as to the correctness of the Phase I Decision. Further, the Board found that adequate reasons were given throughout the Phase I Decision. Therefore, the Coral and CA ground for review relating to the adequacy of reasons did not raise a doubt as to the correctness of the Phase I Decision.

Foothills Pipe Lines Ltd. and TransCanada B.C. System

In December 2005, the NEB approved Foothills Pipe Lines Ltd. (Foothills) final tolls to be made effective 1 January 2006. The approved tolls included an increase in Foothills deemed common equity ratio from 30 to 36 percent. The NEB also approved interim tolls for TransCanada B.C. System to be made interim effective 1 January 2006. The interim approved tolls also included an increase in the TransCanada B.C. System deemed common equity ratio from 30 to 36 percent. Prior to issuing a decision, the Board sought comments from shippers and interested parties and did not receive any comments.

Westcoast Energy Inc.

In August 2004, the NEB approved a settlement reached by Westcoast Energy Inc. (Westcoast) and its shippers that provided tolls for 2004 and a methodology for determining 2005 tolls. On 29 November 2004, the Board approved Westcoast's application for interim 2005 transmission tolls and approved final 2005 tolls on 15 April 2005. On 10 November 2005, the Board approved Westcoast's application for certain firm transportation service enhancements (including term differentiated firm service tolls and authorized overrun service across the system) and daily cross-corridor crediting for northern transportation service. The enhancements were intended to increase the value of firm service and encourage higher levels of contracting. The authorized overrun service and cross-corridor crediting were approved as two-year pilot projects.

Enbridge Pipelines Inc.

On 7 January 2005, Enbridge Pipelines Inc. (Enbridge) applied for approval to recover US$10 million per year in its Canadian pipeline tolls for five years for the extension of service on the Spearhead Pipeline, which extends from Chicago, Illinois to Cushing, Oklahoma. Historically, the pipeline provided south to north service. Enbridge plans to reverse the flow of the pipeline in January 2006 to provide service to new markets south of Chicago.

On 8 February 2005, Enbridge filed another application to recover US$10 million per year for five years in its Canadian pipeline tolls for the reversal of a pipeline to run in a north to south direction between Patoka, Illinois and Corsicana, Texas. The pipeline is owned by Mobil Pipe Line Company. The intent of the reversal was to provide Canadian producers with access to the U.S. Gulf Coast market starting the fourth quarter of 2005.

Both applications were considered in the RH-1-2005 proceeding and a public hearing was held from 7 to 12 April 2005. On 28 April 2005, the Board approved the applications. On 9 June 2005, the Board released its Reasons for Decision, which stated that the applications would result in the efficient use of the existing infrastructure and enable access to new markets in a timely manner to accommodate growth in oil sands supply.

On 25 May 2005, Flint Hills Resources appealed to the Federal Court the Board's decision. Supplement IV – Legal Proceedings 2005 provides details of this appeal.

Application for Priority Destination from Chevron Canada Limited, Chevron Standard Limited and Neste Canada Inc.

In January 2005 the NEB received applications from Chevron Canada Limited (Chevron), Chevron Standard Limited and Neste Canada Inc. for orders designating Chevron's refinery at Burnaby, British Columbia as a priority destination on the Kinder Morgan Canada (formerly Terasen Pipelines (Trans Mountain) Inc.) pipeline system for the unapportioned delivery of crude oil and iso-octane from Edmonton, Alberta. During 2005, the Board dealt with three notices of motion which resulted in the oral hearing being re-scheduled to 6 March 2006.

Financial Audits

The Board periodically audits the financial condition of NEB-regulated pipeline companies. Financial audits provide important information about a company's compliance with regulations, orders and decisions, as well as the extent to which a company operates with due regard for economy and efficiency. The Board also uses financial audits to decide whether cross-subsidies have been made at the expense of toll payers and to enhance its knowledge of the company and its operations. In this regard, the Board completed an audit of Westcoast in 2005.

The Board had three Findings and two Recommendations for which a corrective action plan was filed by Westcoast and approved by the Board on 10 November 2005. As part of its corrective action plan, Westcoast filed an application for exemption from Schedules VI and VII of the *Gas Pipeline Uniform Accounting Regulations* under section 129(1.1) of the Act. This application was also approved on 10 November 2005.

The Board also initiated an audit of the TransCanada Pipeline System, with a focus on the mainline. The fieldwork was completed in December 2005. The audit report will be finalized in early 2006.

POWER LINE FACILITIES

New Brunswick Power Corporation

The NEB issued a certificate to New Brunswick Power Corporation (NB Power) in the fall of 2003 approving the construction and operation of a 95.5 km (59.7 miles), 345 kilovolt (kV), international power line from NB Power's existing transmission terminal at the Point Lepreau Generating Station to a point on the Maine-New Brunswick border, west of St. Stephen, New Brunswick.

In December 2004 and January 2005, NB Power applied to the Board for approval of plans showing the proposed detailed route of the international power line. The company sent notices to landowners and published notices in newspapers near the proposed route. Landowners had 30 days to file an objection with the Board.

In response to the written objections from two landowners, the Board held hearings in St. Stephen, New Brunswick on 9 May 2005. The landowners' objections included ATV access that could potentially damage blueberry lands, and adverse effects on wildlife. The Board approved the detailed route NB Power selected with conditions.

Sumas Energy 2 Inc.

In 2004, the Board denied an application by Sumas Energy 2 Inc. (SE2) to construct the Canadian portion of an international power line originating at the Canadian/United States international boundary near Sumas, Washington and running to Abbotsford, British Columbia. Following the decision, Sumas applied to the Federal Court of Appeal for leave to appeal. Leave was granted

and the matter was heard by the Court in November of this year. On 9 November 2005 the Federal Court of Appeal upheld the Board's decision and dismissed SE2's appeal.

Montana Alberta Tie Ltd.

In December 2005, Montana Alberta Tie Ltd. (MATL), a consortium consisting of Rocky Mountain Power, Lectrix Ltd. and Scott Land and Permitting, filed an application for a permit with the NEB for a 288 km (180-mile), 230-kV transmission line that would run from Lethbridge, Alberta to Great Falls, Montana, and eventually connect into the northwest grid.

An open season was conducted by MATL early in 2005 and produced 13 bids from four companies. Capacity has been contracted for a 15-year period. Last July, FERC accepted the results of the open season saying it was "nondiscriminatory, fair and transparent". The majority of subscribers in the MATL open season are wind project promoters seeking to secure transmission from projects being proposed for construction in northern Montana.

Sea Breeze Power Corp. and its subsidiary

In British Columbia, Sea Breeze Power Corp. (Sea Breeze) and its subsidiary have proposed to build a 22-mile-long, 540 MW, high-voltage, direct current transmission line with converter stations that would run underneath the Strait of Juan de Fuca between Washington State and British Columbia. This international power line would connect the Bonneville Power Administration substation located in Port Angeles, Washington to the substation in Victoria, British Columbia, which is owned by BC Hydro and operated by the British Columbia Transmission Corporation. Sea Breeze received approval from FERC (14 September 2005) for the Victoria to Port Angeles line and filed an application with the NEB in December 2005.

ACTIVITY IN FRONTIER REGIONS

In 2005, the NEB continued to assess project applications for frontier regions and inspect approved activities and facilities. Activity in frontier regions was mostly related to developing producing fields and completing exploratory drilling.

The majority of the exploratory drilling and geophysical programs were in the Central Mackenzie and Mackenzie Delta regions. Geological and geophysical activity in the frontier regions was on par with 2004, though drilling activities continued to decrease slightly. Production continued from the Ikhil gas field, the Norman Wells oil field, the three producing gas fields in the Fort Liard region and the combined oil and gas field in the Cameron Hills region.

During 2005, the Board made eight Significant Discovery Declarations in the southern Northwest Territories pursuant to the NEB and CPR Acts.

Offshore drilling activity in the Beaufort Sea region recommenced in 2005 after 13 years of inactivity. In December 2005, Devon Canada Corporation (Devon) submitted and received approval for its proposed drilling program and subsequently spudded the Pakota C60 well, the first of several it plans to drill at exploration license 420. Devon was required to submit a Comprehensive Study Report for the project and the NEB was the lead responsible authority for the preparation and review of the report.

Regulatory Cooperation in the North

In 2004, the Inuvialuit Final Agreement (IFA) was amended to allow the Environmental Impact Screening Committee to recommend terms and conditions to regulators for development approvals. In 2005, a workshop was held in Inuvik with interested Federal, Territorial and Inuvialuit stakeholders to discuss how to implement an efficient and effective environmental assessment review under the IFA in light of these changes.

Engaging Aboriginals in the North

In 2005 the NEB initiated research on the needs of northern communities with respect to the Board's future aboriginal engagement program. The recommendations and supporting research findings will contribute to the NEB's efforts to develop and implement an engagement program that is suited to affected northern communities. This process is independent of the Mackenzie Gas Project.

PREPARING FOR THE FUTURE

Liquefied Natural Gas Safety Workshop

On 6 January 2005, the Board, in co-operation with the Nova Scotia Department of Energy, hosted a one-day LNG Safety Workshop in Montreal, Quebec. The workshop provided a forum for various federal and provincial departments and agencies:

- to develop a common understanding of what regulators need to know when dealing with an LNG project in Canada; and
- to examine the safety and technical components related to constructing and operating LNG receiving terminals (including shipping, jetty, receiving lines, storage facilities, re-gasification facilities) and to identify gaps in the current regulatory environment.

Over 50 participants contributed to the success of the workshop (report available on the NEB's Internet site).

Following the workshop, a cross-jurisdictional working group was set up to identify provincial accountabilities for the various components of an LNG receiving terminal. The working group produced a compendium of all major regulatory approvals currently required by the respective levels of government for the design, siting and construction of an LNG receiving terminal. This document, entitled "LNG Regulatory Requirements"[4], outlines a current list of the approvals required or which may be sought by a proponent and is subject to change should any particular jurisdiction make changes to its respective requirements. The compendium is intended:

- for use by proponents developing Canadian LNG import facility proposals; federal, provincial and municipal governments examining those proposals, as well as the general public in understanding the necessary regulatory approvals for such facilities;
- to consider each component of an LNG facility;
- to describe the type of assessment required, the regulatory instruments to be issued or which are sought by a proponent and the corresponding legislative requirement;
- to identify the regulatory accountabilities, approvals and permits that are required or sought at different government levels for approval of an LNG project;
- to cover requirements of federal and provincial departments and agencies as well as municipal requirement; and
- to cover the provinces of British Columbia, Quebec, New Brunswick and Nova Scotia, each of which have one or more proposed LNG projects.

The NEB continues to monitor LNG developments as they may affect future regulatory activity at the Board with respect to interconnecting pipelines and import and export authorizations.

4. Available at www.neb-one.gc.ca/energy/lng/lngindex_e.htm#LNGRegulatoryRequirements

ENERGY OVERVIEW

The NEB extensively monitors energy markets to analyze objectively energy commodities and inform Canadians about trends and issues. This section summarizes the Board's review of Canadian energy supply, consumption, production, prices and trade for the past five years, with a focus on 2005.

In 2005, Canadian energy markets continued the trend of high and volatile commodity prices. This trend was accentuated by Hurricanes Katrina and Rita, which occurred in late August and September and devastated U.S. Gulf Coast communities, infrastructure, and energy and industrial sector operations. The powerful storms reduced oil and gas production and processing and electricity transmission from the Gulf of Mexico, intensifying volatility in energy commodity prices.

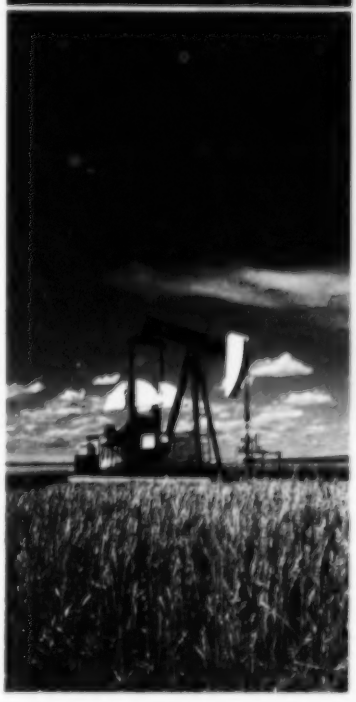
For Canadians, the impact of the rise in energy prices, which are priced globally in U.S. dollars, was moderated by the five percent appreciation of the Canadian dollar relative to the U.S. dollar in 2005.

The current high prices of energy have led to an increase in consumer energy bills and could potentially lead to a decrease in energy demand. In the short-term the demand response has been limited. However, the Board continues to monitor Canadian energy markets and the response of energy users to higher prices.

Influenced by strong world oil demand, lack of global spare oil production capacity and security of supply concerns, world crude oil prices escalated, averaging US$56 per barrel for West Texas Intermediate (WTI), an increase of about 36 percent compared with 2004. West Texas Intermediate began the year at US$43.50 per barrel, but reached a peak of about US$71 per barrel in late August, before subsiding to about US$60 per barrel by year-end.

Canadian crude oil production was uneven during 2005. Production levels decreased during the first three quarters of the year; however, they improved in the fourth quarter. The average production for the year was down by three percent compared with 2004.

In response to high natural gas prices, 2005 was the third consecutive year of record gas drilling in Canada, with an estimated 20 000 gas wells being drilled. The increase allowed Canadian natural gas production to rise marginally in 2005. Although conventional gas output remained relatively flat, supply was supplemented by a small but growing contribution from natural gas from coal (NGC). Conventional gas from western Canada accounted for roughly 96 percent of annual production, with NGC providing almost two percent. The addition of a fifth field to the Sable Island project helped to maintain east coast offshore production, which made up the remaining two percent.



Rising crude oil prices, hot summer weather that increased gas use for electricity generation, and supply disruptions because of hurricane activity in the Gulf of Mexico contributed to natural gas prices averaging about US$8.40 per MMBtu across North America in 2005, an increase of about 50 percent compared with 2004.

Rapid growth in the wind industry is a key development in Canadian electricity markets. Wind generation currently provides less than one percent of Canadian generation capacity (840 megawatt [MW]); however, it is expected to grow rapidly over the next several years. A record number of wind turbines were installed in 2005, with more than 350 MW installed compared with 120 MW installed in 2004. Higher energy prices, the federal wind power production incentive, and "energy calls" by several provincial governments for green and renewable power are increasing the interest in wind power. Development of wind power has been particularly strong in Alberta, Quebec, Ontario, Manitoba and Saskatchewan. In 2005, the Board initiated a study on emerging technologies for power generation which will be published in 2006.

In 2005, electricity production was up slightly from 2004. Improved water conditions meant that hydro-generation increased by 1.8 percent. Higher prices for fuel led to a two percent decrease in thermal generation and an increase of less than one percent in nuclear generation. On the demand side, domestic demand remained relatively flat, while exports increased by 30 percent because of improved hydroelectric capability.

ENERGY AND THE CANADIAN ECONOMY

In 2005, the energy industry accounted for almost six percent of Canada's Gross Domestic Product (GDP) and employed around 330 000 people (1.9 percent of the Canadian labour force). Energy export revenue of about $80 billion accounted for an estimated 19 percent of the value of Canadian goods and services exported in 2005 – an increase of 15 percent from 2004. Changes in 2005 energy export volumes varied depending on the commodity. Crude oil exports decreased by four percent, coal and coal products exports increased 31 percent, refined petroleum products and natural gas were down by about one percent, and electricity exports increased by 30 percent. In 2005, Canada's net energy export revenue (the value of energy exports minus value of energy imports) was $46.0 billion, up from $38.6 billion in 2004 (Figure 4). This increase is largely attributed to the increase in energy export revenue.

Total Canadian energy production (Table 1) remained flat in 2005 compared with an increase of 3.1 percent in 2004. During the 2001 to 2005 period, average Canadian energy production increased one percent per year.

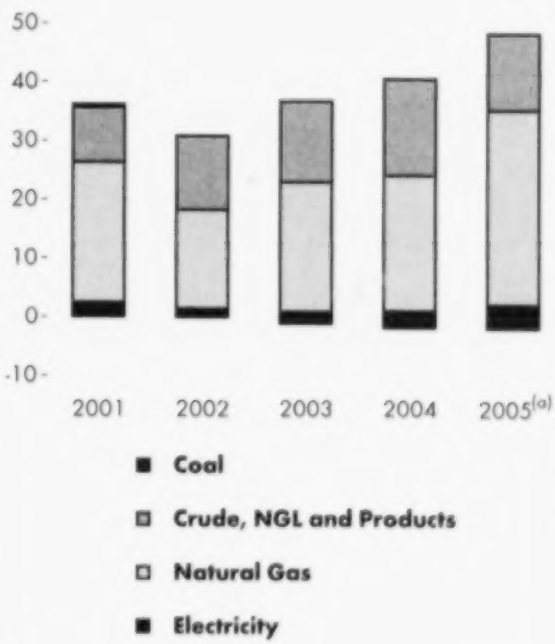
TABLE 1: DOMESTIC ENERGY PRODUCTION BY SOURCE (PETAJOULES)

	2001	2002	2003	2004	2005[a]
Petroleum[b]	5 717	6 049	6 365	6 517	6 305
Natural Gas	6 667	6 660	6 462	6 524	6 592
Hydroelectricity	1 182	1 245	1 198	1 207	1 299
Nuclear	837	824	817	986	993
Coal	1 533	1 430	1 326	1 432	1 443
Renewable and Other[c]	588	631	633	657	681
Total	**16 524**	**16 839**	**16 801**	**17 323**	**17 313**

(a) Estimates
(b) Petroleum includes crude oil and gas plant natural gas liquids (NGLs)
(c) Includes steam, solid wood waste, spent pulping liquor and annual firewood
Source: Statistics Canada, NEB

Petroleum and natural gas accounted for 36 percent and 38 percent, respectively, of total energy production in 2005. Hydroelectricity production accounted for eight percent of the total and experienced the largest increase in 2005 due to a recovery from drought conditions. The declining trend in coal production stopped in 2004 with production increasing in 2005 because of high demand for coal in China and the start of production from new mines late in the year. Production from renewable and other energy sources increased by nearly four percent over 2004, partly a result of increased wind energy coming online in several regions. Nuclear energy production increased slightly.

FIGURE 4: NET ENERGY EXPORT REVENUES (BILLION C$)



(a) Estimates

TABLE 2: DOMESTIC ENERGY CONSUMPTION[a] (PETAJOULES)

	2001	2002	2003	2004	2005[b]
Space Heating	1 885	1 970	2 065	2 032	2 074
Transportation	2 240	2 250	2 242	2 346	2 383
Other Uses(c)	3 050	3 164	3 298	3 312	3 391
Non-Energy(d)	863	894	903	1 018	1 075
Electricity Generation(e)	1 841	1 911	1 850	2 029	2 068
Total	**9 879**	**10 189**	**10 358**	**10 737**	**10 991**

(a) Includes consumption of imported energy

(b) Estimates

(c) Includes energy used for space cooling and ventilation as well as a variety of uses in the industrial sector.

(d) Includes energy used for petrochemical feedstocks, anodes/cathodes, greases, lubricants, etc.

(e) Includes producer consumption and losses as well as nuclear energy conversion requirements.

Source: Statistics Canada, NEB

Preliminary estimates indicate that domestic energy consumption increased by 2.4 percent in 2005. From 2001 to 2005, Canadian energy consumption increased an average of 2.3 percent per year compared with the five-year average real GDP growth rate of 2.9 percent. This suggests a slight improvement in the energy intensity of the economy over the past five years (Table 2).

UPSTREAM OIL AND GAS ACTIVITY

High prices for oil and natural gas drove upstream activity to new heights in 2005. The number of oil and natural gas wells drilled in 2005 increased to over 25 000, or 12 percent above the record set in 2004 (Figure 5). Oil and gas-related activity increased in 2005, with the split roughly the same as last year at 80 percent directed to gas and 20 percent to oil (including oil sands). The increase was achieved despite wet weather and flooding in parts of western Canada that hampered activity in the first half of the year. Operations in the second half more than compensated for weather-associated delays, with the number of active rigs significantly higher than in any previous non-winter period. Competition for land rights, rigs, services, materials and labour pushed drilling costs higher during the year, but overall, cost increases were exceeded by the rise in crude oil and gas prices.

In 2005, there were 488 drilling rigs operating on average each month in western Canada. This is an increase of 18 percent over 2004. More drilling rigs were added to the fleet in 2005 than in previous years in response to high demand in the field. To ensure availability, several companies committed to leasing rigs for extended periods of one year or more. Availability of enough trained personnel to operate the growing rig fleet and to identify prospects and undertake drilling programs remains a challenge for the gas industry going forward. The most active areas continue to be in the northeastern portion of British Columbia, the Alberta Foothills, and south-central Alberta where there is a large increase in NGC production. In addition, Manitoba is on target to experience its best year in terms of activity in more than 50 years.

FIGURE 5: NUMBER OF WELLS DRILLED

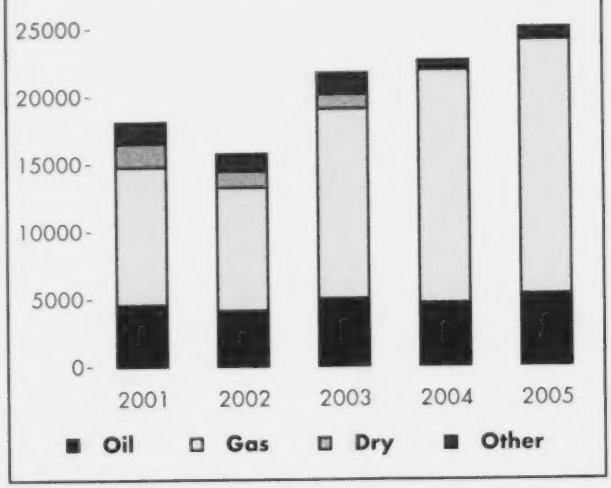
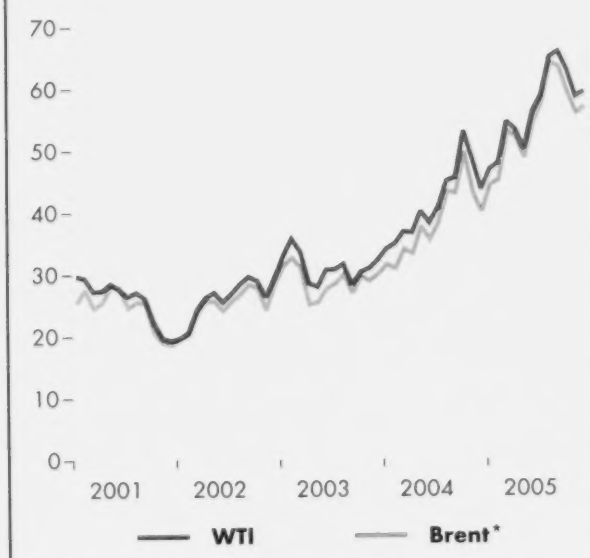


FIGURE 6: WTI AND BRENT OIL PRICES (US$/BBL)



* Brent is the common benchmark for European crude oil pricing.

Competition for land rights increased in 2005, with western provinces collecting $2.3 billion in revenue from land sale bonuses up over 60 percent from the previous year. The average price per hectare increased to $571 in 2005, from $312 in 2004. Record British Columbia sales accounted for a portion of the increase, and Saskatchewan land sales were up 80 percent over 2004. In Alberta, interest was strong in NGC regions and oil sands areas, with continued interest in the foothills and southeast areas of the province. The call for bids on exploration licenses offshore Newfoundland in 2005 received over $71 million in work expenditure commitments over the next five years on five parcels compared with $673 million on eight parcels in 2004. The industry continues to evaluate previously acquired parcels offshore Nova Scotia; however, no new commitments were made in 2005.

Seismic survey activity in western Canada continued a gradual decline in 2005, with the number of active crews down two percent from 2004. This level of activity remains below the five-year average and indicates that the emphasis is on exploration and development in previously surveyed areas. Seismic activity in 2005 was focused in the southwest and the foothills regions of Alberta and in northeast British Columbia. On the east coast, there were a total of 24 seismic crews working during 2005, an increase of 50 percent over the previous year and equivalent to two percent of seismic survey activity in Canada during 2005.

Canada's oil and gas industry undertook $39.1 billion of capital expenditures in 2005, an 18 percent increase over 2004. Estimated capital spending on oil sands projects rose by eight percent during the year to account for 17 percent of industry capital spending.

CRUDE OIL AND NATURAL GAS LIQUIDS

International Markets

World crude oil prices were very high in 2005 underpinned by a tight global supply and demand balance, reflecting significant demand growth and limited spare production and refining capacity. Weather related events further exacerbated the tight supply and demand balance. Benchmark WTI began the year around US$43 per barrel and, by March, the average for the month exceeded US$54 per barrel. Prices increased again in August when the average for the

month was nearly US$65 per barrel, reflecting the supply losses from Hurricane Katrina. The high price for the year of US$70.85 per barrel occurred on 30 August. Prices then began to moderate following announcements that the International Energy Agency would release supplies from its member country emergency stocks and the United States would offer to sell crude oil from its Strategic Petroleum Reserve. West Texas Intermediate closed the year at US$60 per barrel. The average price for 2005 was about US$56 per barrel, an increase of US$15 per barrel or 36 percent compared with 2004. Figure 6 illustrates the price of WTI and Brent for the years 2001 through 2005.

The Organization of Petroleum Exporting Countries (OPEC) held five meetings in 2005 to review the worldwide supply and demand situation and establish its production quotas. In January, OPEC decided not to change its existing quota of 27 million barrels per day. The group also decided to suspend its price band target for its basket of seven crude oils. At its March meeting, OPEC raised its quotas by 0.5 million barrels per day to 27.5 million barrels per day. It also decided to change the composition of the OPEC basket to include 11 crude oils, representing the main export streams from each member country. In June, OPEC again opted to increase its quota by 0.5 million barrels per day to 28 million barrels per day effective 1 July 2005. At its September session, OPEC did not change its quota but announced that it would make its estimated spare capacity available to the market if there were buyers. In December, at its last meeting for the year, OPEC did not change its quota and announced that the offer to make the spare capacity of two million barrels per day available to the market would not be extended beyond 31 December 2005.

Canadian Oil Production and Reserves Replacement

In 2005, Canadian production of crude oil and equivalent averaged 391 900 cubic metres per day (m^3/d), down by about three percent from 2004 levels. This reduction reflects declining Western Canada Sedimentary Basin (WCSB) conventional crude oil production and operational problems experienced at oil sands mining and upgrading projects and at the Terra Nova Field offshore Newfoundland and Labrador (Table 3).

TABLE 3: CANADIAN PRODUCTION OF CRUDE OIL AND NATURAL GAS LIQUIDS (THOUSAND CUBIC METRES PER DAY)

	2000	2001	2002	2003	2004	2005[a]
Conventional Light (East)	23.6	24.3	46.0	54.1	50.5	48.4
Conventional Light (West)	108.3	103.9	96.0	92.1	87.6	82.5
Synthetic (Upgraded Bitumen)	50.1	54.7	69.1	82.7	95.2	81.8
Pentanes Plus	27.3	25.8	25.2	25.8	25.7	24.9
Total Light	**209.3**	**208.7**	**236.3**	**254.7**	**259.0**	**237.6**
Conventional Heavy	89.0	90.9	88.0	86.7	86.5	84.7
Non-Upgraded Bitumen	44.4	47.7	47.4	55.2	61.5	69.6
Total Heavy	**133.4**	**138.6**	**135.4**	**141.9**	**148.0**	**154.3**
Total Crude Oil and Equivalent	**342.7**	**347.3**	**371.7**	**396.6**	**407.0**	**391.9**
Natural Gas Liquids	99.8	92.9	95.6	94.4	96.3	94.2

(a) Estimates

Production offshore Newfoundland and Labrador was down by four percent to 48 400 m^3/d, reflecting the natural decline in the Hibernia and Terra Nova fields and several short-term operational problems at the Terra Nova field. In western Canada, crude oil and equivalent supply decreased by three percent in 2005. Conventional light crude oil production declined by six percent, reflecting the natural decline of light oil reservoirs in the WCSB. Conventional heavy crude oil production levels declined by two percent, in line with a general shallow downtrend that has developed since the production peak in 2001.

Although total production in 2005 was down compared with 2004, production levels in the fourth quarter were strong, reflecting the return to production of the oil sands integrated mining and upgrading plants in Alberta and the start of production at the White Rose Field offshore Newfoundland and Labrador. The contribution from these new projects is expected to increase 2006 Canadian crude oil production levels by about 10 percent from 2005 levels.

Though remaining established reserves are reduced by production each year, new discoveries, extensions to existing pools and revisions to reserve estimates in existing pools usually add to reserves. From 2000 to 2004, cumulative additions of conventional light and heavy crude oil to established reserves replaced 80 percent of production (Table 4).

TABLE 4: CONVENTIONAL CRUDE OIL RESERVES, ADDITIONS AND PRODUCTION 2000-2004 (MILLION CUBIC METRES)

	2000	2001	2002	2003	2004	Total
Additions[a]	78.8	35	88.1	60.8	66.9	329.6
Production	79.1	84	81	85.6	82.7	412.4
Total remaining Reserves	700	680	690	663	640	
Total In Millions of Barrels	**4 405**	**4 279**	**4 342**	**4 172**	**4 027**	

(a) White Rose reserves added in 2002

The NEB's estimate of total remaining Canadian conventional crude oil and crude bitumen reserves at year-end 2004 (the last year for which complete data is available) is 28.3 billion cubic metres, a decrease of 0.5 percent compared with 2003 (Table 5). Estimates of remaining established conventional crude oil reserves in Canada decreased by three percent to 639.9 million cubic metres for 2004, and remaining established crude bitumen reserves decreased slightly to 27.7 billion cubic metres reflecting 2005 bitumen production.

Oil Sands

The existence and importance of Canada's very large crude bitumen reserves, in the context of world oil supply, continued to attract attention from multinationals, integrated producers and national oil companies seeking to participate in oil sands development.

In 2005, bitumen production from mining and in situ operations totalled 169 100 m^3/d, down two percent from 2004. In situ bitumen production increased by 13 percent to 69 600 m^3/d. Bitumen from mining operations decreased by 11 percent to 99 500 m^3/d, and upgraded bitumen production declined by 14 percent to 81 800 m^3/d (Figure 7).

TABLE 5: ESTIMATES OF ESTABLISHED RESERVES OF CRUDE OIL AND BITUMEN AT 31 DECEMBER 2004 (MILLION CUBIC METRES)

Conventional Crude Oil	**Initial**	**Remaining**
British Columbia[a]	126.0	21.9
Alberta[b]	2 665.0	249.3
Saskatchewan[c]	858.7	187.8
Manitoba[d]	40.5	4.3
Ontario[e]	14.7	2.0
NWT(Nunavut) and Yukon		
Arctic Islands and Eastern Arctic Offshore[d]	0.5	0.0
Mainland Territories - Norman Wells	53.3	16.8
Nova Scotia[d] - Cohasset and Panuke	7.0	0.0
Newfoundland[d] - Hibernia, Terra Nova and White Rose	239.0	157.8
Total	**4 004.7**	**639.9**
Total in Millions of Barrels	**25 201.2**	**4026.8**
Crude Bitumen		
Oil Sands - Upgraded Crude[f]	5 590	5 090
Oil Sands - Bitumen[g]	22 802	22 570
Total	**28 392**	**27 660**
Total in Millions of Barrels	**178 668**	**174 062**
Total Conventional and Bitumen	**32 397**	**28 300**
Total in Millions of Barrels	**203 869**	**178 088**

Sources:

(a) British Columbia Ministry of Energy & Mines and NEB common database

(b) Alberta Energy & Utilities Board and NEB common database

(c) Saskatchewan Reservoir Annual 2003

(d) Provincial Agencies and Offshore Boards

(e) Canadian Association of Petroleum Producers

(f) Bent Horn abandoned 1996

(g) Alberta EUB Reserves and Supply Outlook

Note: Totals may not add due to rounding.

Unscheduled interruptions at the three major integrated mining and upgrading operations resulted in decreased production and also led to lower output of upgraded products. At the Scotford Upgrader, operated by Shell Canada Limited, one of two production trains was shutdown for maintenance and repairs from October 2004 through January 2005. The same train was also shut down for a period in mid-March. At Suncor Energy, damage caused by fire in early January cut production in half until repairs were completed in mid-September. In October, Suncor completed an expansion that increased oil sands production capacity to 41 300 m^3/d from the previous capacity of 35 700 m^3/d. At Syncrude Canada Ltd., repairs and turnaround activities resulted in production being about 10 percent below previously forecast volumes.

High world oil prices in 2005 and the outlook for sustained high prices in the future have attracted a great deal of attention to the oil sands and led to increased plans for oil sands investment and development. The extent to which these plans will be realized depends largely on the capacity of industry to build these facilities and on continued attractive economic returns for bitumen production and upgrading.

Crude Oil Exports and Imports

Total crude oil exports, including pentanes plus and upgraded bitumen (synthetic crude), are estimated at 249 730 m^3/d, a decrease of 9 870 m^3/d or four percent from 2004. The 2005 total consisted of 32 percent light crude oil and equivalent and 68 percent blended heavy crude oil.

Prices remained high throughout 2005. The estimated value of crude oil exports is $30.1 billion compared with $26.4 billion in 2004. In 2005, the projected average light crude oil export price was $68 per barrel ($426 per cubic metre) and the heavy crude oil export price was $38 per barrel ($286 per cubic metre). In 2004, the average light crude oil export price was $52 ($328 per cubic metre) and the heavy crude oil export price was $40 per barrel ($249 per cubic metre)(Figure 8).

FIGURE 7: CRUDE BITUMEN PRODUCTION, 2001-2005
(THOUSAND CUBIC METRES PER DAY)

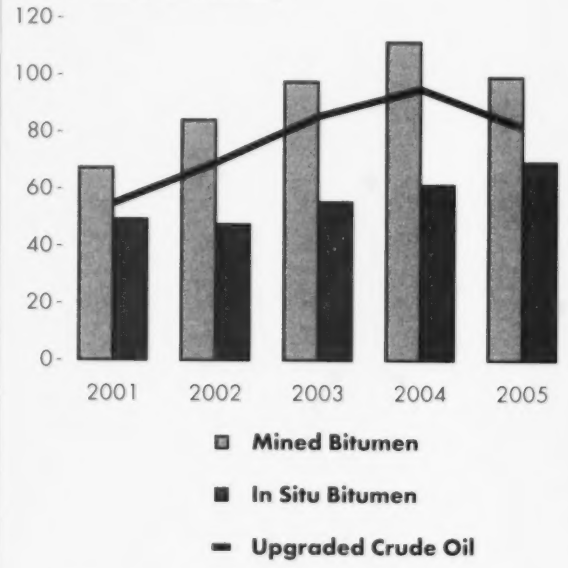
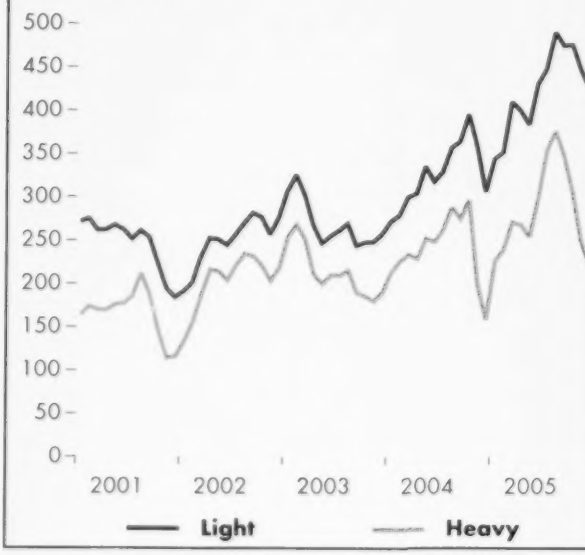


FIGURE 8: LIGHT AND HEAVY CRUDE OIL EXPORT PRICES
($ PER CUBIC METRE)



The light/heavy price differential widened in 2005 to average about $26 per barrel ($163 per cubic metre) compared with $16 per barrel ($101 per cubic metre) in 2004 (Figure 8). The differential narrowed slightly during the summer asphalt season but widened again in September. Hurricanes on the U.S. Gulf Coast kept the differential wide as heavy volumes were stranded in the market because of the loss of refining capacity on the Gulf Coast. Light sweet crude oil continued to strengthen because of high demand for light refined petroleum products and tight North American refining capacity. Prices began to decline in October with the release of International Energy Agency emergency petroleum stocks and crude oil from the United States' Strategic Petroleum Reserve.

In 2005, Canada remained the leading crude oil exporting country to the United States, surpassing Mexico and Saudi Arabia. High demand during most of the year for diesel fuel, motor gasoline and jet fuel resulted in North American refineries operating at over 95 percent of capacity. The U.S. Midwest is the largest market for western Canadian crude oil. The refining centers of Chicago, Illinois, Twin Cities, Minnesota and Toledo, Ohio consumed 53 percent of total Canadian crude oil exports (Figure 9). In December, the available market expanded to the U.S. Gulf Coast with the reversal of Mobil's pipeline from Patoka, Illinois south. Canadian crude oil is delivered to this line via the Enbridge Lakehead Pipeline to Lockport, Illinois and the Mustang Pipeline to Patoka.

The export market for eastern Canadian offshore production has been primarily the U.S. East Coast. In 2005, Canada exported 93 percent of its offshore crude oil production to Petroleum Administration for Defense District (PADD I), one percent to the U.S. Gulf Coast, and six percent to foreign markets. In 2005, Canada imported 143 500 m^3/d of crude oil, which represents 50 percent of total refinery feedstock requirements in Canada. Crude oil requirements for the Atlantic and Quebec regions were met through east coast production and imports. Ontario refiners received about 40 percent of their feedstock requirements from foreign sources in 2005, half of which originates in the United Kingdom and Norway. Canada is a net exporter of crude oil.

Oil Refining

In 2005, Canadian refining capacity declined three percent to 319 600 m^3/d because of the closure of the Petro-Canada refinery in Oakville, Ontario. The loss of this capacity was mitigated by capacity expansions in Quebec.

Refinery production of main petroleum products also declined slightly to 286 000 m^3/d. Demand for main petroleum products in Canada increased averaging 225 730 m^3/d. Refinery receipts of domestic crude oil averaged 145 300 m^3/d, reflecting the decrease in refining capacity. Commercial inventories of petroleum products in Canada closed the year slightly higher than in 2004.

Main Petroleum Product Exports and Imports

Canada remains a net exporter of main petroleum products including middle distillates (heating oil, diesel, kerosene and jet fuel), heavy fuel oil and gasoline. In 2005, exports of main petroleum products and partially processed oil are estimated at 55 800 m^3/d, a seven percent decrease from 2004. The reduction in production levels mean less volume available for the export market.

The estimated revenue in 2005 from main petroleum product exports, including partially processed oil is $6.2 billion, up from $5.8 billion in 2004. Strong demand in North America for gasoline and diesel fuel along with refineries operating at capacity led to high product prices in the second quarter of 2005. The impacts of Hurricanes Katrina and Rita exacerbated the already tight refinery capacity situation by forcing the closure of many refineries on the U.S. Gulf Coast. This resulted in the prices for gasoline, diesel and jet fuel reaching record highs in August and September.

The United States continued to be the largest buyer of Canadian produced petroleum products, accounting for about 96 percent of total exports. Exports were also made to Europe, Africa and parts of the Caribbean. The U.S. East Coast continued to be the largest market, followed by the U.S. West Coast and the U.S. Midwest.

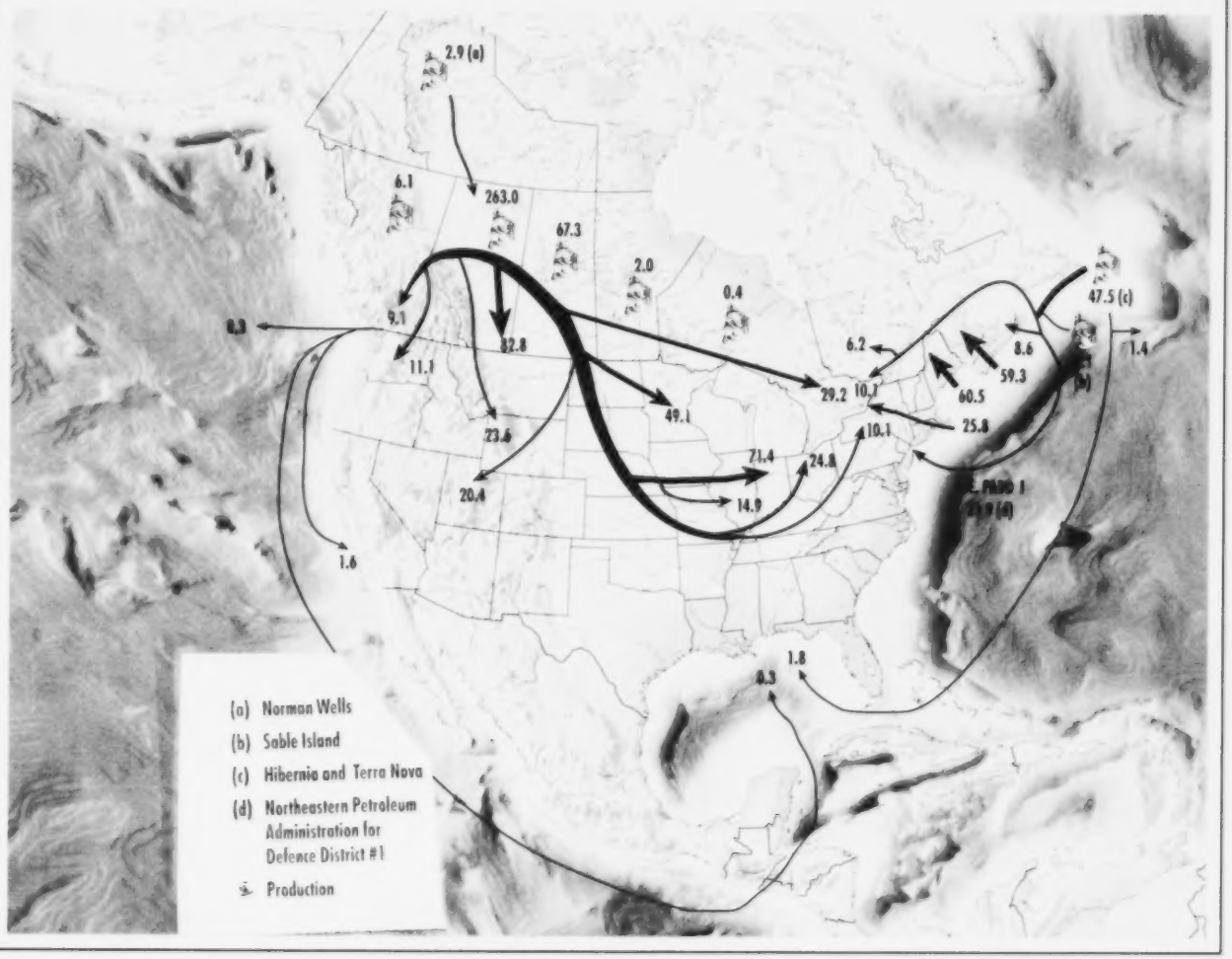
Imports of main petroleum products in 2005 are estimated at 27 100 m^3/d, a 13 percent increase from 2004.

Natural Gas Liquids (excluding Pentanes Plus)

Natural gas liquids (NGLs) are the liquid hydrocarbon products extracted from the natural gas stream and are initially recovered as a hydrocarbon mix. The component parts can then be further fractionated or separated into valuable and marketable products such as ethane, propane and butanes. Propane and butanes are also produced from crude oil refining and upgrading processes – products from these processes are referred to as liquefied petroleum gases (LPG). In 2005, it is estimated that 88 percent of propane and 68 percent of butane supplies came from natural gas production.

In 2005, refinery production of propane and butane declined from 2004 levels because of unplanned maintenance at oil sands mining operations and one

FIGURE 9: CRUDE OIL AND EQUIVALENT SUPPLY AND DISPOSITION 2005
(THOUSAND CUBIC METRES PER DAY)



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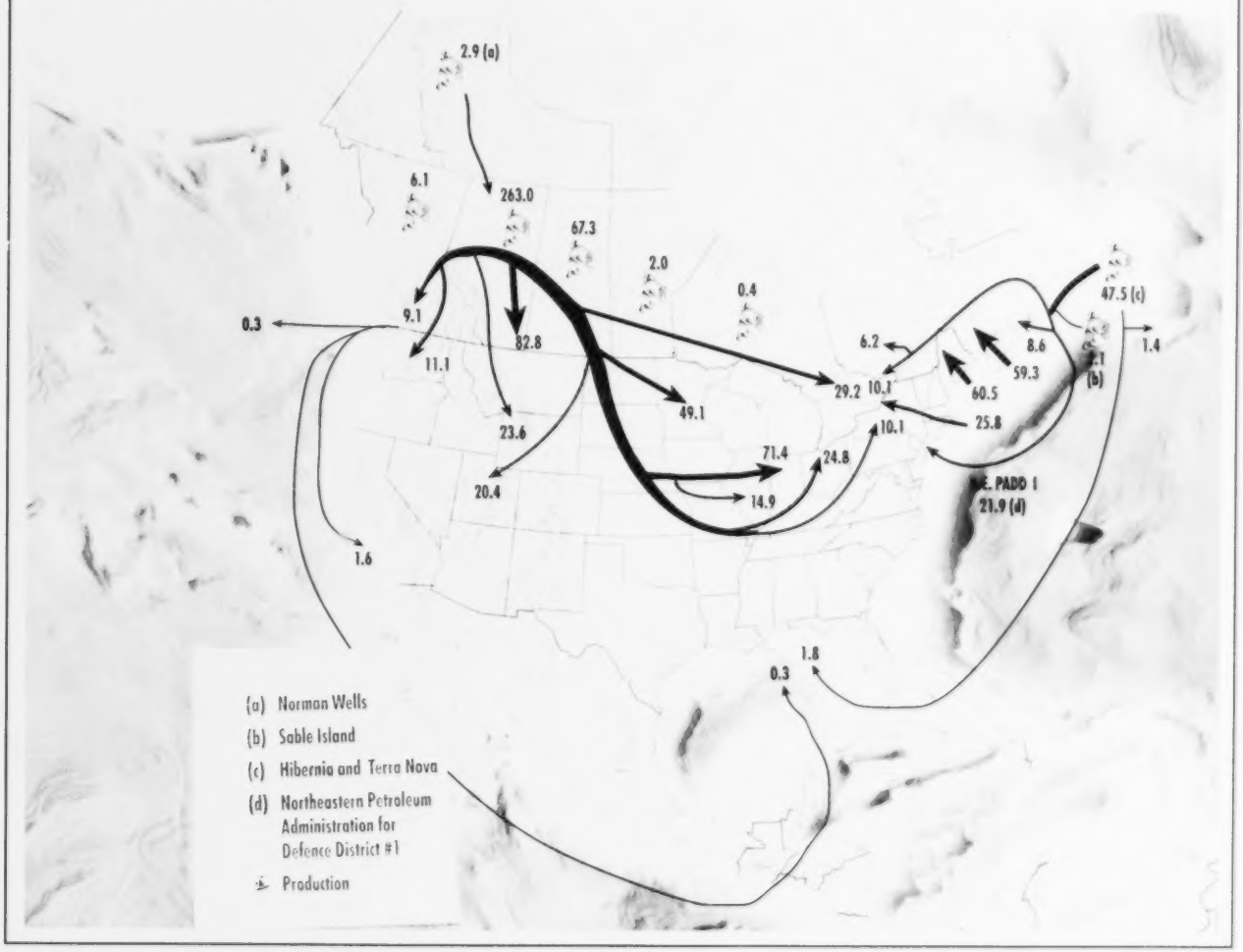


refinery closure. Refinery production of propane is estimated at 3 700 m^3/d, a 13 percent decrease. Butane refinery production declined a marginal one percent because of continued strong demand for heavy oil diluent and is estimated at 7 600 m^3/d.

High NGL prices, supported by exceptionally high crude oil prices, created the incentive for NGL gas plant extraction through most of 2005. However, Canada experienced some weather-related damage to gas processing facilities in late June. Storms hitting southern and central Alberta temporarily shut down some of the Empress straddle plants. Further problems with the decompression/recompression facilities on the Foothills pipeline in October also decreased NGL volumes being extracted at Empress. These events primarily affected ethane and propane production. Ethane production decreased by about two percent to 39 500 m^3/d. Propane production from gas plants decreased by two percent to 27 400 m^3/d. Butane gas plant production remained relatively unchanged at 16 000 m^3/d.

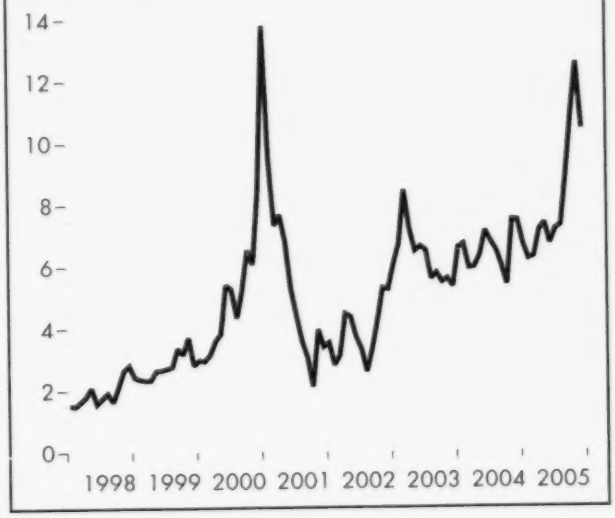
The U.S. Midwest continues to be Canada's largest export market for propane and butanes, accounting for about 60 percent of the total export volume. Hurricanes Katrina and Rita caused extensive damage to the gas processing industry in the U.S. Gulf Coast region and to refineries and natural gas production facilities. As a result, exceptionally high volumes of propane were exported to the United States from Canada during the latter part of the year to supplement lost U.S. supply. However, for 2005 overall, propane exports declined by 14 percent from 2004 to 20 600 m^3/d. Butane export volumes also declined 12 percent to 4 400 m^3/d.

The higher prices for propane offset lower propane export volumes, resulting in estimated 2005 export revenue of $2.1 billion, three percent lower than in 2004. Higher butane prices combined with the same export volume resulted in 2005 export revenue for butane totalling $562 million, which is four percent higher than in 2004.

Natural Gas

Despite a milder than normal winter in 2004-2005, North American gas prices continued to move higher during the year in response to insignificant production growth, rising crude oil prices, and a hot summer in key regions that led to more gas use for electricity generation (Figure 10). The major market development in 2005 was the significant disruption of U.S. gas production in the Gulf of Mexico and along the U.S. Gulf Coast because of a hyperactive hurricane season. In Canada, rising gas requirements for oil sands projects generally offset demand reductions associated with high gas prices in other industrial sectors. Relatively stable gas supply and demand in Canada resulted in a slight increase in net gas exports to the United States.

FIGURE 10: ALBERTA NATURAL GAS PRICES - AECO-C ($ PER GIGAJOULE)



Natural Gas Production

With the exception of the short-lived Ladyfern gas field in British Columbia and the addition of east coast offshore production, Canadian natural gas production has been relatively stable since 1999. Production in western Canada is being maintained by drilling more wells to offset a gradual erosion in size and performance of gas prospects, which typically occurs as development of a basin progresses. Gas drilling in 2005 was no exception, rising by nine percent over the previous year's record to an estimated 20 000 wells and providing a one percent increase in production to 485 million cubic metres per day. The rise in drilling occurred despite delays caused by wet conditions and flooding in southern Alberta. Development of the South Venture field as part of the Sable Offshore Energy Project helped to maintain offshore Nova Scotia production at 11 million cubic metres per day.

In 2005, British Columbia's share of total natural gas production was 16 percent compared with 15 percent in 2004. Alberta's share of production dropped slightly to 77 percent in 2005 from 78 percent in 2004. Production levels in the other provinces were largely unchanged in 2005 with Saskatchewan representing four percent, Nova Scotia two percent, Northwest Territories and Yukon 0.3 percent, and Ontario 0.2 percent.

Natural Gas Reserves

The NEB's estimate of remaining marketable natural gas reserves at the end of 2004 (the last year for which data is available), is 1 545 billion cubic metres (Table 6). Reserve additions were 202 billion cubic metres in 2004 and replaced 115 percent of annual production (Table 7). The rise in remaining reserves was the first since 1995 and was largely because of increased exploration, supplemented by improved recovery in known gas fields. Both factors were driven by the increase in natural gas prices. Initial reserves increased in Alberta, British Columbia and Saskatchewan and Ontario in 2004, while the frontier regions remained unchanged.

TABLE 6: ESTIMATES OF ESTABLISHED RESERVES OF MARKETABLE NATURAL GAS AT 31 DECEMBER 2004 (BILLION CUBIC METRES)

	Initial	Remaining
British Columbia[a]	822.1	284.3
Alberta[b]	4 496.2	1 127.1
Saskatchewan[c]	224.6	75.0
Ontario[d]	33.8	11.5
NWT, Nunavut & Yukon[c]	32.1	14.1
Nova Scotia - Offshore	54.6	32.5
Total	**5 663.4**	**1 544.5**
(Total In Trillion Cubic Feet, Tcf)	**199.9**	**54.5**

(a) British Columbia Ministry of Energy & Mines and NEB common database
(b) Alberta Energy & Utilities Board and NEB common database
(c) NEB Estimate
(d) Canadian Association of Petroleum Producers

TABLE 7: NATURAL GAS RESERVES, ADDITIONS AND PRODUCTION (BILLION CUBIC METRES)

	2000	2001	2002	2003	2004	Total
Additions	169	169	166	92	202	799
Production	176	179	179	174	175	884
Total Remaining Reserves	**1 622**	**1 612**	**1 599**	**1 518**	**1 545**	
Total in Trillion Cubic Feet	**57.3**	**56.9**	**56.4**	**53.6**	**54.5**	

Natural Gas Demand

The significant increase in the gas price and mild weather during the heating seasons caused the total demand in Canada to fall by roughly 2.5 percent in 2005. The industrial sector was the most responsive to changing market conditions with demand falling by over three percent. Residential and commercial gas demand was similar to 2004 because of mild weather during much of the 2005 heating season.

Natural Gas Exports and Imports

Net natural gas exports rose to 93.5 billion cubic metres in 2005 or four percent higher than the previous year (Figure 11). The increase in net exports comprised a 3.4 percent rise in gross exports from Canada to 105.7 billion cubic metres and a 2.4 percent drop in natural gas imports to 12.2 billion cubic metres.

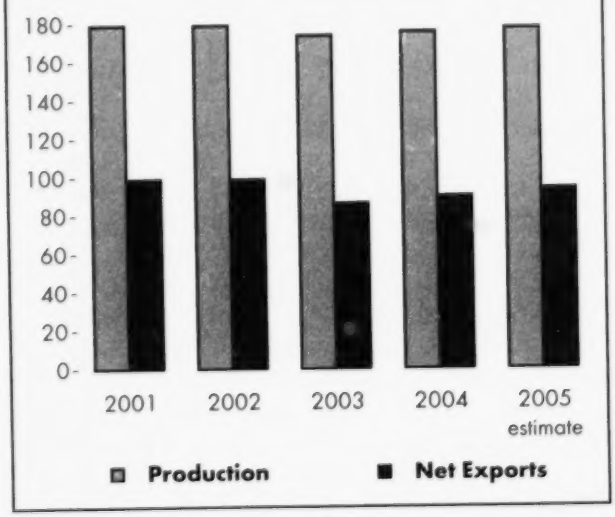
The increase in net exports was a result of lower gas demand in Canada because of mild winter weather and the slight increase in Canadian natural gas production. In 2005, net exports represented 53 percent of total Canadian production.

The U.S. Midwest and Mountain regions continued to account for the largest share of exports at 48 percent, a slight reduction from 49 percent in 2004 (Figure 12). The U.S. Northeast market experienced the largest increase in exports in 2005 with the region's share rising to 28 percent from 25 percent in 2004. The increased use of Canadian gas in the U.S. Northeast reflects higher gas use for power generation during the hot summer, reduced gas flows from the Gulf Coast due to hurricanes, and lower LNG imports. The California and Pacific Northwest regions slipped to 24 percent of exports in 2005 compared with 26 percent in 2004, as greater use of Rockies gas and improved hydro conditions reduced gas requirements for power generation.

Short-term orders were used for roughly 88 percent of exports compared with 87 percent in 2004. Long-term licenses are in place for the remaining exports.

The value of Canadian natural gas exports to the U.S. set a record in 2005. Revenues from net exports rose to $33.1 billion in 2005 compared with $26.5 billion in 2004 because of higher export volumes and significantly higher prices. The average export price of $9.68 per gigajoule in 2005 was 36 percent higher than the $7.13 per gigajoule earned in 2004. Compared to 2004 export prices in 2005 were higher in every month with the exception being January 2005.

FIGURE 11: CANADIAN NATURAL GAS PRODUCTION AND NET EXPORTS (BILLION CUBIC METRES)



ELECTRICITY

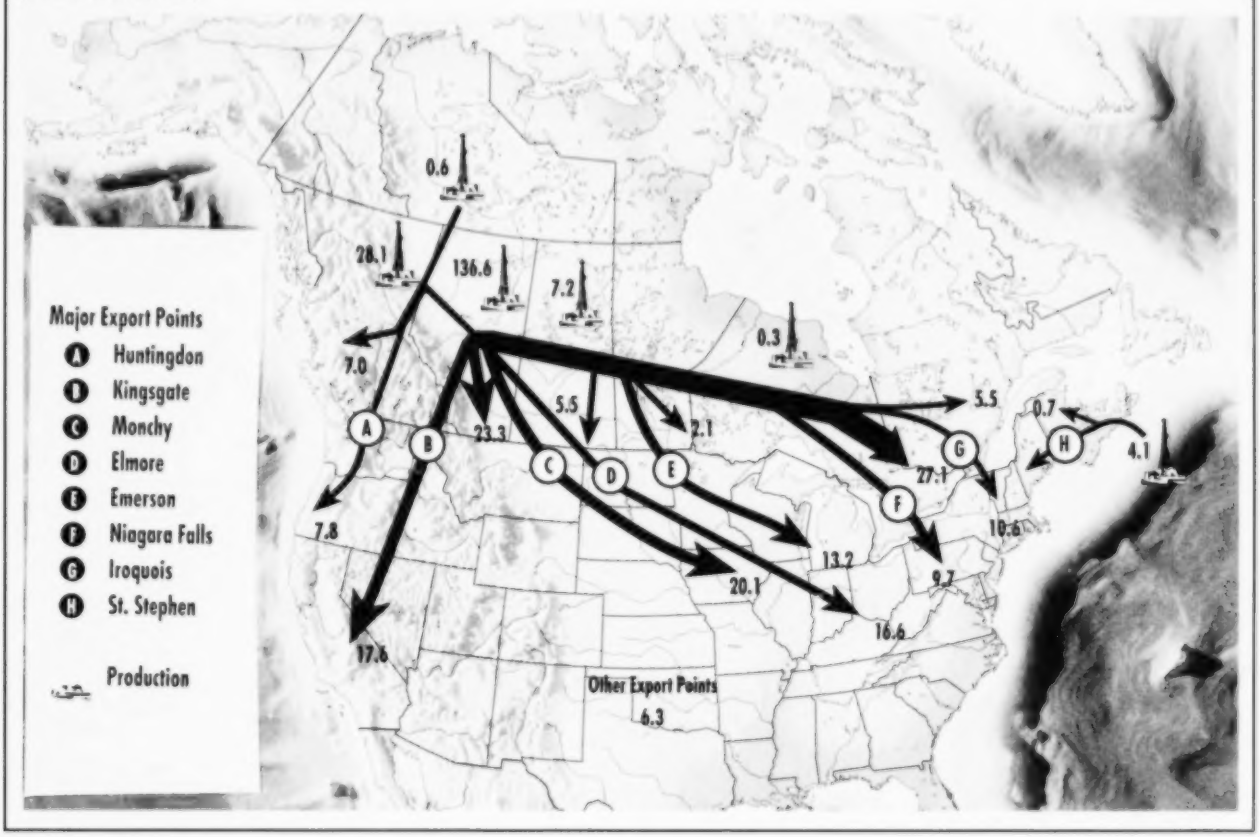
Restructuring and Market Developments

Canada

Though the NEB authorizes electricity exports and the construction and operation of international power lines, jurisdiction over the electricity industry in many respects resides with the provinces and territories. Across the country in 2005, regional jurisdictions took action to implement measures to restructure their markets and move forward on specific initiatives for ensuring longer-term supply adequacy.

In 2005, the Government of Newfoundland and Labrador issued a request for proposals (RFPs) for developing the Lower Churchill hydro resources. After assessing the proposals that were received, the provincial government selected three full development proponents to progress to the next phase. (The province is also considering developing the project on its own.) In the next phase, project proponents will complete a feasibility review and discuss commercial principles. Potential markets for the hydro resources include Newfoundland and Labrador,

FIGURE 12: NATURAL GAS SUPPLY AND DISPOSITION 2005
(BILLION CUBIC METRES)



Ontario, Québec, the Maritime Provinces and the U.S. Northeast. In November, the provincial government released a discussion paper that will be the basis of a consultation process for developing an energy plan for Newfoundland and Labrador. The public consultation process will begin in early 2006.

With the passage of the *Electricity Act (2004)*, Nova Scotia put in place restructuring plans to mandate wholesale access to Nova Scotia Power Inc.'s (NSPI) transmission system for six municipal distributors. These distributors account for about five percent of Nova Scotia's electricity demand. Nova Scotia Power Inc., a utility owned by Emera, serves the remainder. The Nova Scotia Utility and Review Board approved NSPI's Open Access Transmission Tariff in May. The New Brunswick System Operator (NBSO) will be the control area operator and reliability coordinator for Nova Scotia. The NBSO will operate NSPI's internet-based Open Access Same-Time Information System to support non-discriminatory open access to the transmission system. The proposed implementation will allow transmission customers to make a single point-to-point reservation for using the New Brunswick and Nova Scotia transmission systems.

Nova Scotia's *Electricity Act (2004)* also mandated a renewable portfolio standard to foster the development of renewable power in the generation sector.

Quebec is also developing a long-term energy strategy. In November, the Québec Government issued a consultation document that set out energy policy objectives and preferred orientations. It is expected that it will publish a definitive energy strategy in early 2006. Hydro-Québec (HQ) has continued to enhance its supply capability to meet domestic and export loads. In August, HQ Production inaugurated the 526 MW Toulnustouc hydro generating station. In October, HQ Distribution issued a call for tenders for the purchase of an incremental 2 000 MW of wind power scheduled for December 2009 to December 2013. Including new tenders, HQ expects to purchase a total of 3 500 MW of wind power by the end of 2013. In its 2006 budget filed with the Régie de l'énergie (Régie), HQ Distribution raised its energy savings objective from 3.0 TWh to 4.1 TWh by 2010. The new target is nearly double the 2.1 TWh in annual savings recommended by the Régie in 2004.

In Ontario, pursuant to changes in the *Electricity Restructuring Act (2004)*, the Ontario Power Authority (OPA) came into existence. The OPA will support the provincial government's efforts to ensure adequate supply as the province deals with phasing out its coal-fired generation plants (by 2009) and with some uncertainty regarding the return of its nuclear reactors to service. The OPA was active in authorizing new supplies of clean (natural gas) and green (wind and other renewables) energy through a series of power purchase arrangements, and in 2005, issued more invitations to interested parties to bid on futures supplies. In December, OPA announced recommendations for the future supply mix for the province and will coordinate these recommendations with an electric transmission system plan later in 2006.

On the demand side, Ontario encountered challenges with meeting summer peak loads in 2005. This forced the Independent Electricity System Operator to issue public appeals to reduce consumption on several occasions. It is expected that tightness during future peak periods will be reduced because of new generation that started in late 2005. In addition, the summer peak load may be somewhat reduced with the start of time-of-use pricing in May 2006, which will mean significant differences between peak and off-peak prices.

Ontario and Manitoba announced plans to expand the Clean Energy Transfer Initiative. The proposal could see additional power flow starting as early as 2006 (400 MW by 2009) with de-bottlenecking of the current interconnection in northwestern Ontario.

In late 2005, Manitoba and Saskatchewan saw the start of two large wind projects. A 99 MW project is located near St. Leon, southwest of Winnipeg, Manitoba and the Centennial project (150 MW) is located southeast of Swift Current, Saskatchewan.

In Alberta, 450 MW of new generation was brought online when Genesee 3, Canada's first "supercritical" coal-fired generating facility, was completed in March. In October, it was announced that the 660 MW Cloverbar natural gas-fired generating unit would be taken out of service because there were no economically feasible operating alternatives for the plant. In November, the Balancing Pool announced that the 756 MW Sheerness Power Purchase Agreement had been sold to TransCanada Power for fifteen years. Strong opposition in the Alberta electricity sector put the implementation of a capacity market in Alberta to rest.

In June, the British Columbia Hydro and Power Authority (BC Hydro) announced it would not proceed with the Duke Point Power Project because of risks associated with the completion date. The project would have supplied electricity to customers on Vancouver Island. BC Hydro issued a call for power in December, targeting the procurement of about 300 MW of electrical energy from Independent Power Producers to meet energy needs starting in 2010. A minimum of 50 percent of the energy is to be purchased from B.C. Clean Electricity sources.

United States

Important trade in electricity occurs between Canadian and U.S. jurisdictions. Although Canada is a net exporter to the United States, mainly because of the availability of hydroelectric resources, both countries realize commercial benefits and improved electric reliability.

In 2005, the New England Independent System Operator, located adjacent to New Brunswick and Quebec, and the Midwest Independent System Operator (MISO), located adjacent to Ontario, Manitoba, and Saskatchewan, joined the PJM Interconnection as FERC-approved regional transmission organizations (RTO). The timing and membership of Grid West (located adjacent to Alberta and British Columbia) is uncertain. Though the current start-up could occur in 2008, the Bonneville Power Administration, a major player, has recently withdrawn. Manitoba Hydro has a coordination agreement with MISO, and British Columbia has expressed interest in gaining membership in Grid West through the British Columbia Transmission Corporation.

Electric Reliability

In August, the United States Congress passed the *Energy Policy Act* of 2005. This comprehensive energy legislation includes several initiatives directed toward the electricity sector, including a process to enable the implementation of mandatory electric reliability standards. Pursuant to this legislation, the FERC will have oversight of an independent Electric Reliability Organization (ERO) that will implement and enforce mandatory reliability standards.

Because of the interconnected nature of the bulk power (wholesale) system (e.g. between Canada and the United States and between the United States and Mexico), the ERO will seek recognition by Canadian and Mexican regulatory authorities. In preparation, the North American Electric Reliability Council (a party seeking to become the ERO) began informal discussions in late 2005 with the provincial regulators and the NEB. Discussions included how Canada's interests would be represented in the ERO.

Electricity Production

Water conditions continued to improve in many parts of Canada in 2005 and hydro generation recovered slightly from 59 percent to 60 percent of total generation. Because of higher thermal fuel (coal, natural gas, oil) costs, total electricity production from thermal sources in 2005 decreased slightly but its share of total Canadian electricity production remained constant at about 26 percent. Nuclear generation increased slightly in 2005 and its share of electricity production was maintained at about 15 percent. The net effect was an increase in electricity production from 567.8 TWh in 2004 to 568.9 TWh in 2005 (Table 8).

TABLE 8: ELECTRICITY PRODUCTION (TERAWATT HOURS)[a]

	2001	2002	2003	2004	2005[b]
Hydroelectric	328.3	345.9	332.8	334.5	340.4
Nuclear	72.4	71.3	70.7	85.3	85.9
Thermal	165.1	161.6	160.7	148.0	145.1
Total	**565.8**	**578.8**	**564.2**	**567.8**	**568.9**

(a) Source: Statistics Canada Energy Statistics Handbook. Table 8.2 Utility Generation of Electricity in Canada and Table 8.3 Industry Generation of Electricity in Canada

(b) Estimates

Similar to last year, several provinces in 2005 issued RFPs for new sources of electricity production. Provinces issued RFPs designed at increasing production capacity, diversification and flexibility of supply. The RFPs brought in proposals for a variety of generation projects some of which included wind and other renewable energy, thermal, hydroelectric and cogeneration.

Electricity Demand

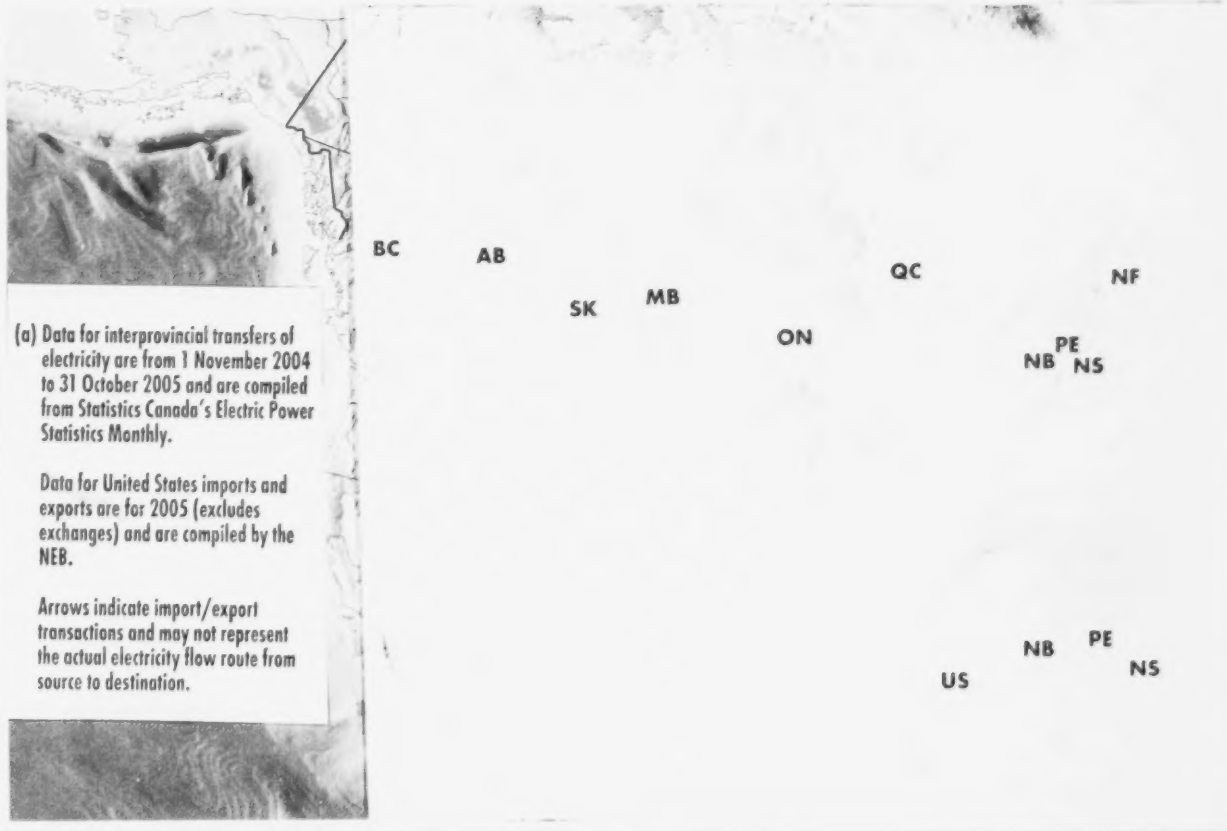
Electricity demand was relatively flat in Canada with about 548.8 TWh consumed in 2004 compared with 549.1 TWh in 2005. Warmer than normal winter weather in both 2004 and 2005 helped suppress increases in heating demand. Over the past five years, domestic demand has remained fairly flat increasing by about less than a percent per annum on average, while production also remained flat. Reasons for the minimal change in demand include improvements in technology, and the introduction of government programs and standards to encourage conservation.

Electricity Exports and Imports

In recent years, exports have trended downward mainly because of growing domestic demand and below average precipitation levels in hydro-based provinces. Imports have trended upward to meet temporary supply deficiencies in some areas. As a result, in 2003 and 2004 Canada experienced a smaller net export position. In 2005, Canada's net exports rebounded. A significant contributing factor was higher water levels caused by increased precipitation, particularly in Manitoba, a large contributor of exports to the United States.

In 2005, Canada's total exports rose to 42.9 TWh from 33 TWh, an increase of about 30 percent from the previous year (Figure 13). This follows a 13 percent increase in 2004 and is only the second time exports have risen since 2000. Imports declined 14 percent to 19.3 TWh from 22.5 TWh in 2004. Overall, Canada's net export position in 2005 was 23.7 TWh or 125 percent higher compared with the previous year.

FIGURE 13: INTERNATIONAL AND INTERPROVINCIAL TRANSFERS OF ELECTRICITY[a]
(GIGAWATT HOURS)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Arrows indicate import/export transactions and may not represent the actual electricity flow route from source to destination.

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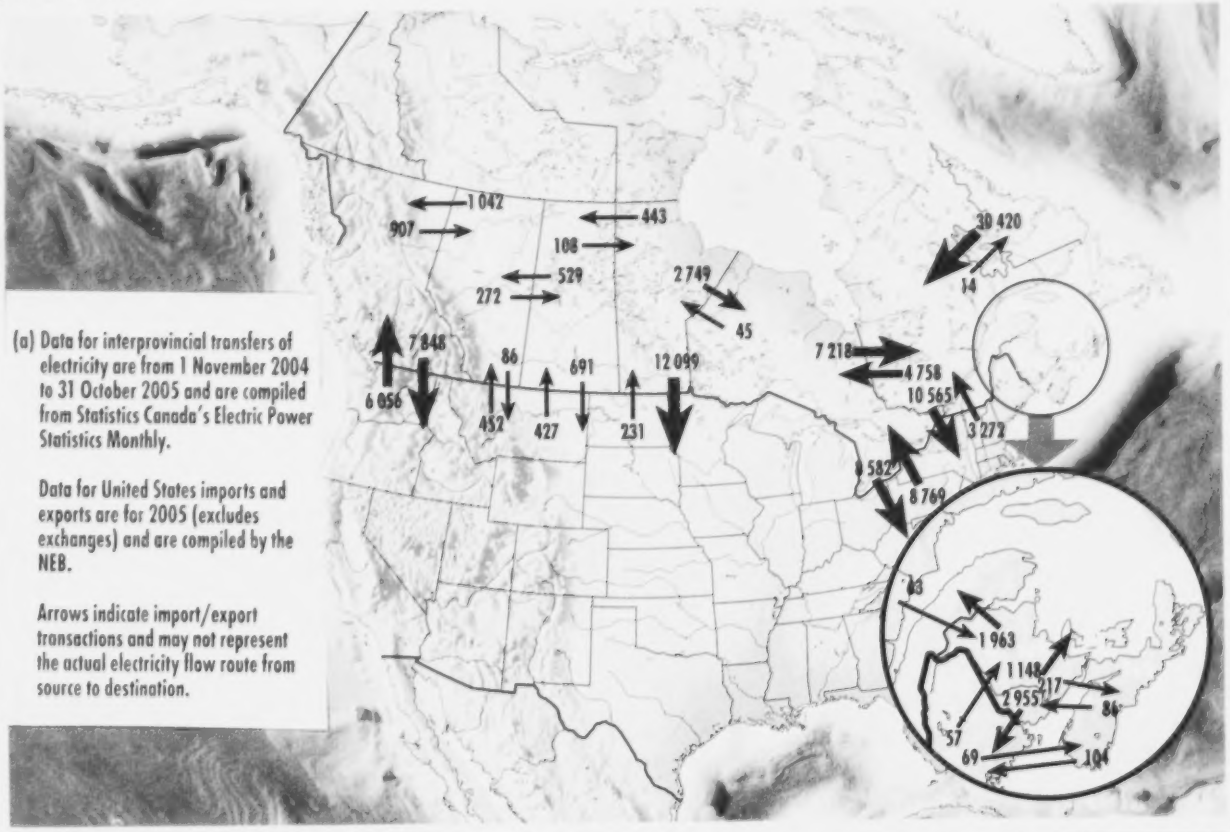

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SAFETY, SECURITY AND THE ENVIRONMENT

The NEB ensures the regulated energy industry operates in a manner that protects the employee, contractor, public, and the environment. The NEB's mandate now also includes oversight for the security of pipelines and international power lines, reflecting amendments made to the NEB Act that came into effect in April 2005.

"NEB-regulated facilities are built and operated in a manner that protects the environment and respects the rights of those affected."

The inherent risks associated with pipelines and other facilities regulated by the NEB are managed through competent design, construction, and operation and maintenance practices. Regulated companies have the primary responsibility for ensuring safety and environmental protection because they are the designers, builders and operators of the facilities. The NEB recognizes this responsibility in the ongoing development of goal-oriented regulation, which places the onus on companies to ensure their facilities are safe and secure and are operated in an environmentally responsible manner. The NEB plays a significant role by ensuring that the companies maintain or improve their safety and environmental performance. The Board ensures that companies identify and manage the safety, security, environmental, socio-economic and land risks associated with the lifecycle of regulated facilities. The Board achieves this by:

- developing goal-oriented regulations and guidelines;
- assessing facility applications from an engineering and safety perspective;
- conducting environmental, socio-economic and land assessments;
- ensuring companies conduct appropriate consultation with affected parties regarding proposed facilities;
- ensuring that appropriate mitigation measures, approval conditions and environmental protection plans are in place before granting project approval;
- reviewing construction progress reports, inspecting facilities, and auditing management systems to confirm regulatory requirements are met and to assess the effectiveness of mitigation measures, conditions, and environmental protection plans;
- assessing safety practices and procedures under the NEB mandate as well as through the *Canada Labour Code* through a Memorandum of Understanding (MOU) between Human Resources and Skills Development Canada (HRSDC) and the Board;

- investigating incidents with the intent of preventing future similar occurrences;
- addressing landowner complaints;
- meeting with regulated companies to review and assess the adequacy of their integrity management programs;
- responding to emergencies to monitor and contribute to the effectiveness of company responses;
- issuing safety advisories; and
- conducting inquiries or formal investigations into safety and environmental issues.

SAFETY AND SECURITY ASSESSMENTS

Perception of Safety

In March 2005, an NEB report entitled "Focus on Safety and Environment – A Comparative Analysis of Pipeline Performance 2000-2003" was released. This is the third report arising from the Safety Performance Indicator Initiative and reflects the most recent data available (more information about this initiative and copies of the reports are available at www.neb-one.gc.ca/safety/SafetyPerformanceIndicators/index_e.htm). The report was restructured in 2005 to better reflect the broad nature of its content in the areas of the environment, safety and integrity performance of regulated companies. More improvements are underway for the 2006 publication based on comments received during the NEB workshop in June 2005 and from a survey of stakeholders done in November 2005.

The performance of federally regulated pipeline companies within Canada, as outlined in this report, compares favourably with the performance of similar industries in the United States and Europe. The results reported for 2002-2003, with the exception of worker safety, are in line with or lower than NEB historical averages (Table 9).

TABLE 9: AMALGAMATED ENVIRONMENTAL, SAFETY AND INTEGRITY PERFORMANCE DATA OF REGULATED COMPANIES (2003)

Indicator	Historical Average 2000 to 2003	2002	2003
Fatality Frequency (fatalities per 100 full time equivalent workers)	0	0	0
Combined Injury Frequency (injuries per 100 full time equivalent workers)	1.10	0.49	0.99
Contractor Injury Frequency (injuries per 100 full time equivalent workers)	3.00	1.92	3.04
Employee Injury Frequency (injuries per 100 full time equivalent workers)	0.48	0.16	0.66
Rupture Frequency (ruptures per 1 000 km)	0.10	0.07	0
Spill Frequency (spills per 1 000 km)	0.32	0.74	0.07
Spill Volume Frequency (volume spilled per 1 000 km) (m^3)	31.01	29.71	0.28
Gas Release Frequency (releases per 1 000 km)	0.45	0.31	0.21

The Board consulted with stakeholders on this matter at the NEB workshop held in Calgary in June 2005. The proceedings from this workshop can be found on the NEB Internet site at www.neb-one.gc.ca/Publications/NEBWorkshops/2005NEBWorkshopProceedings_e.pdf.

Preliminary analysis of the data for the 2004 reporting year indicates that contractor injury frequency has been reduced compared with previous years. The Board will continue to monitor performance in this area.

Companies are required to report incidents experienced during their operations in accordance with the *Onshore Pipeline Regulations, 1999* (OPR-99) and the *National Energy Board Processing Plant Regulations*. NEB staff investigate these incidents in varied levels of detail depending on the severity of the event. When these investigations expose information that the Board feels would improve the safety performance of the industry, that information is shared through a Safety Advisory. Three NEB Safety Advisories were published in 2005 (www.neb-one.gc.ca/safety/SafetyAdvisories/index_e.htm).

The advisories issued in 2005 included:

- the hazards associated with the failure or incorrect programming of programmable logic controllers required for fail-safe shut down of compressors and associated components;
- the safety hazards associated with shallow gas deposits in the Northwest Territories; and
- emphasis on the importance of disallowing the use of equipment in need of repair or which is defective in any way.

As a result of these safety advisories, facilities, operators and regulators can respond more knowledgeably to the hazards identified, thereby improving safety.

Regulating Pipeline Security Management

On 20 April 2005, the *Canadian Public Safety Act* was signed by Governor in Council, thereby amending the NEB Act to explicitly include security as part of the Board's mandate and provide the Board with the legislative authority to regulate security of energy infrastructure under its jurisdiction. The NEB is implementing a goal-oriented approach for meeting this mandate, supporting industry-led effective security management programs.

The Board's first step in addressing security management was to launch a Pipeline Security Management Assessment (PSMA) program in 2004:

- to assess existing pipeline security management programs at NEB-regulated companies;
- to promote security awareness; and
- to define the focus of regulatory oversight and compliance initiatives related to security management.

The program included a review of companies' security management programs followed by field verifications and site visits in 2004 and 2005. In total about 75 facilities across Canada were visited.

Between June 2004 and March 2005, the Board completed PSMAs on all ten Group 1 pipeline companies and two Group 2 pipeline companies. (See Supplement II for the Group 1 and Group 2 company lists.)

The PSMAs have provided the NEB with valuable insight as to how regulated pipeline companies are managing pipeline security and provided the Board with a perspective to establish a common baseline of security management programs in the regulated industry. The PSMAs also provided the Board with the knowledge needed to develop reasonable and prudent security-focused regulations and compliance strategies.

On 14 September 2005, a Notice of Proposed Regulatory Change outlining the Board's intent to include security management in the OPR-99 was sent to all regulated companies and interested parties. The Board is considering the comments from these stakeholders while developing the security regulations. The Proposed Regulatory Change is expected to be released in 2006 and will outline the Board's regulatory expectations regarding security management. Further, in co-operation with pipeline associations, the pipeline industry, and provincial and federal government departments and agencies, the Board plans to develop a security management guide or consensus standard on security management to be referenced by the revised OPR-99.

To deal with overlapping and adjoining jurisdictions, common regulatory objectives and the need for effective communication about security management, the Board has developed, and continues to develop, formal and informal working agreements with federal and provincial government partners.

In October 2005, in cooperation with NRCan's Energy Infrastructure Protection Division and the Canada Nova Scotia Offshore Petroleum Board (C-NSOPB), the NEB developed a protocol and participated in a security management assessment of selected offshore facilities that form part of the Sable Offshore Energy Project (SOEP). The security management assessment was completed as a cooperative effort with the output being a single common report, with an agreed upon assessment of the program and recommendations. In this regard it provided all parties with the assurance that the SOEP operations and associated land-based support systems are being managed appropriately and effectively (from a security management perspective) and in compliance with applicable legislative requirements.

The C-NSOPB regulates portions of the SOEP which are directly connected to, and indirectly interconnected with, NEB-regulated facilities, such as pipelines, a shore-based control valve, the Goldboro Gas Plant and the Maritimes & Northeast Pipeline system.

Feedback from industry representatives indicates that the NEB's approach to regulating security management has been logical and practical. The NEB expects to continue with this approach. In developing the security regulations and the regulatory program to manage pipeline security, the NEB plans to continue to work closely with industry, the pipeline associations, the provincial regulators and agencies, federal agencies, and U.S. counterparts.

Although federal and provincial agencies have undertaken an enhanced security management focus and concerted security initiatives in the past several years, the immediate responsibility for protecting pipeline infrastructure remains with the pipeline companies. The Board expects that companies will remain diligent in developing, maintaining and applying adequate and effective security practices to protect their pipeline systems.

The Board believes that an effective security management program should address all reasonable security threats that could adversely affect the continued integrity of the pipeline systems, thereby compromising public safety, environmental protection, and the supply of transported product in an economically efficient manner. The comprehensiveness of these programs must, however, consider the size of the company, the operations involved, the facilities and the assets being protected, and be weighed against the potential risk of a successful security breach.

Based on the findings of the PSMA program, the responses to the Notice of Proposed Regulatory Change, and the feedback received from industry and other government departments and agencies, the Board is developing regulations and the strategy for regulating security management.

In 2006, the Board plans to release a Proposed Regulatory Change to address the inclusion of Security Management into the OPR-99, and plans to develop a security management guide or consensus standard on security management as a reference for the revised OPR-99.

The Board will continue to develop working relationships with provincial and federal partners and the industry to ensure that security is managed in a responsible and prudent manner and in the interest of the Canadian public.

ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENTS

Regulatory Context

Environmental and socio-economic assessments are governed by a dynamic and complex regulatory framework. Most NEB-regulated activities fall under the NEB Act; however, upstream oil and gas activities in frontier areas (areas not subject to a federal/provincial shared management agreement) are governed by the COGO Act. Most projects considered by the NEB must also undergo assessments under the CEA Act, or, for those projects in the Northwest Territories south of the Inuvialuit Settlement Region, under Part 5 of the *Mackenzie Valley Resource Management Act*. In 2005, the NEB completed one comprehensive study (Beaufort Sea Exploration Drilling Program) and 34 screenings

under the CEA Act, and completed or contributed to four preliminary screenings under the *Mackenzie Valley Resource Management Act*.

The NEB uses a streamlining approach to manage an effective and efficient socio-economic assessment process. In dealing with projects not excluded or streamlined, the Board uses a structured risk-management approach that considers the likelihood and consequence of potential effects. For example, certain simple, routine energy projects, such as adding a valve or a meter station to an existing pipeline under specific conditions, as identified in various provisions of the CEA Act *Exclusion List Regulations* and the NEB's Streamlining Order, are dealt with using a risk management approach. This helps to focus assessment attention and resources on larger or more complex projects (e.g. Mackenzie Gas Project) with potential for significant environmental and socio-economic effects.

In order to support an efficient assessment approach, the Board's environmental comprehensive study process has been integrated with the NEB hearing processes. The NEB will now carry out a comprehensive study within its established regulatory hearing process. The Board has also developed an internal guide to provide staff with information necessary to effectively and efficiently coordinate an approach to the comprehensive study process to better conform to the scheme of the CEA Act and the quasi-judicial nature of the NEB's responsibilities.

Coordination of Environmental Assessments

The NEB continues to work with stakeholders, including the CEA Agency, federal departments and provincial agencies, to improve the environmental assessment (EA) of federally regulated energy infrastructure projects. Activities in 2005 included coordination of federal departments involved in NEB projects, EA process simplification, and negotiations to harmonize EA processes with other jurisdictions.

For example, the NEB has led, or participated in, several early coordination initiatives to ensure regulators come to early agreement on the scope, issues and timing of federal EA for projects that are likely to proceed to a regulatory application. In 2005, the NEB engaged in early EA coordination processes for several proposed projects, including the Rabaska LNG terminal near Québec City, the Terasen anchor loop oil pipeline (British Columbia and Alberta) and the Enbridge Gateway oil pipeline (British Columbia and Alberta).

Substitution under the CEA Act

Some CEA Act requirements for major projects partially duplicate NEB Act processes and present an opportunity for increased EA harmonization and efficiency. In 2005, the NEB continued to collaborate with the CEA Agency on reform and consolidation of federal EA. The NEB supported the CEA Agency's commitment to use the substitution provisions of the CEA Act on a pilot basis for a designated NEB-regulated project.

Rabaska LNG Federal-Provincial EA Harmonization Discussions

Throughout 2005, the NEB, the CEA Agency, and the Québec Bureau d'audiences publiques sur l'environnement (BAPE) explored ways to harmonize the provincial and federal environmental assessment of the proposed Rabaska LNG terminal near Québec City. It is expected that the application for Rabaska will be filed with the provincial government.

SAFETY AND ENVIRONMENTAL OPERATIONS

Monitoring Compliance

The NEB monitors the activities undertaken by regulated companies from the initial design of the facilities through to ultimate abandonment. This monitoring is performed in order to assess compliance with conditions attached to the original Order or Certificate and to assure that the company is designing, constructing, operating or abandoning its facilities in accordance with the applicable regulations under the NEB Act and the COGO Act.

Compliance verification is conducted using a mix of audits, inspections and other methods. These tools are applied using a qualitative risk approach. In 2005, significant progress was made towards the implementation of an integrated compliance verification program which will be implemented in 2006. This program will focus the Board's compliance verification activities where they can achieve the optimum benefits.

The NEB uses tracking tools to monitor compliance, determine the effectiveness of conditions in obtaining the desired safety and environmental results, and report on the results.

The NEB supports a cooperative approach to compliance, working with companies to ensure that safety and environmental commitments and requirements are met. Non-compliance situations are handled in the first instance by obtaining an immediate and voluntary correction by the company. If a situation cannot be corrected immediately, or if additional information is required from a company, NEB inspectors may ask for a written Assurance of Voluntary Compliance (AVC).

In 2005, the NEB received an average of 0.48 AVC's on each inspection. This number is less than in the previous two years (0.53 AVC's per inspection in 2004 and 0.73 AVC's per inspection in 2003) and may be attributed to a combination of factors. There may be an enhanced understanding of the Board's expectations as a result of better communication to industry through workshops and compliance verification activities. In addition, it must be noted that the mix of compliance verification activities in 2005 was heavily focused on operations due to reduced levels of construction activity under the Board's jurisdiction.

Inspection officers appointed under the NEB Act can issue a stop work order where there are reasonable grounds to believe that a hazard to the safety of the public or employees of a company, or a detriment to property or the environment, is being or will be caused by the construction, operation, maintenance or abandonment of a pipeline, or any part of a pipeline, or an excavation activity or the construction of a facility. No such orders were issued by NEB inspection officers in 2005.

Inspections

The NEB inspects the pipelines and facilities it regulates from construction through to abandonment. Inspection, safety and conservation officers confirm compliance with:

- legal requirements set out within the NEB Act and the COGO Act and the applicable subordinate legislation;
- commitments set out in the application and made during proceedings; and
- conditions of the project approval (e.g. Board Orders or Certificates).

In addition to inspections carried out under the NEB Act and the COGO Act, several NEB inspectors have also been designated as Health and Safety Officers by HRSDC. These Health and Safety Officers enforce the requirements of Part II of the *Canada Labour Code* among NEB-regulated companies on behalf of HRSDC.

Inspections provide valuable data necessary for the development of intelligence-based planning for future compliance verification activities. In addition, they serve to build a respectful working relationship between regulated companies and the NEB. As a respected and visible regulator, the NEB is able to obtain compliance from companies through discussion and rarely needs to escalate enforcement action beyond the receipt of an AVC.

Operational Safety Inspection Targets

In 2005, the NEB began to adjust the balance of operational safety inspections by establishing targets for the number of inspections of the larger (Group 1) companies and the small (Group 2) companies, which have less frequent interaction with the NEB. Eleven Group 1 companies and 22 Group 2 companies were inspected.

The intentional targeting of Group 2 companies provided the Board with the opportunity to engage these companies. In addition, it provided the Board with current intelligence on activities within these companies.

Facilities Inspections

The NEB inspects facilities construction and operation to ensure regulatory compliance. For example, inspections are conducted along existing pipeline systems to assess whether third party excavation work is being completed in compliance with the *Pipeline Crossing Regulations.*

In 2005, NEB inspection officers carried out:

- 11 safety and engineering and 7 environmental inspections on NEB-regulated projects under construction;
- 92 inspections of NEB-regulated facilities under operation;
- 10 pipeline crossing inspections;
- 13 post-construction environmental inspections to evaluate the success of reclamation and other mitigation measures on recently completed construction projects;
- 1 environmental inspection of a pipeline abandonment project;
- 8 inspections in response to environmentally-related landowner concerns;
- 130 workplace inspections under the *Canada Labour Code.*

Pipeline Operation and Maintenance Activities

In July 2005, the NEB implemented a risk-oriented approach to regulating operations and maintenance (O&M) activities on pipelines under the jurisdiction of the NEB Act. This move was in response to regulated companies requesting more clarity about how O&M activities should be regulated and to landowners' continued emphasis on respect for their rights throughout the lifecycle of a regulated facility.

The Board issued a letter on 12 July 2005 to clarify which types of projects are considered O&M activities and, therefore, do not require an application under s.58 of the NEB Act. This risk-based approach clarifies and streamlines regulatory oversight of activities integral to the ongoing operation of approved facilities, allowing the Board and regulated companies to focus resources on non-routine activities. The letter introduced a requirement for companies to notify the Board before commencing certain types of O&M activities. Based on the risks associated with a particular O&M activity planned by a company, the notification provides the NEB with the opportunity to inspect the proposed activity. The requirements also clarify the NEB's expectations for companies to engage potentially affected stakeholders, particularly landowners, throughout the life of a regulated facility. A copy of the 12 July 2005 letter and associated requirements and guidance notes can be found on the NEB's Web site at www.neb-one.gc.ca/ActsRegulations/NEBAct/GuidanceNotes/OperationsMaintenancePipelines_e.pdf.

The Board continues to regulate all O&M activities through its established inspection and audit programs, which ensure these activities are carried out with respect to safety, security, environmental protection, economic efficiency, and the rights of those affected. In 2005, the Board received 23 notifications of O&M activities and conducted four safety and engineering and two environmental inspections of these activities. To date, informal feedback from regulated companies has been positive. The Board plans to conduct a six month review of this O&M approach in February 2006.

Environmental Conditions

Through inspections and company filings, the NEB monitors not only company compliance with the conditions on Board Orders or Certificates but the effectiveness of those conditions in obtaining the desired safety and environmental results. In 2005, 56 environmental conditions were confirmed to be effective in achieving their desired outcomes, whereas one was not. This condition could not be confirmed to produce an effective outcome because it was not accompanied by the now standard company compliance self-reporting condition.

FIGURE 14: ACHIEVEMENT OF DESIRED END RESULTS FOR ENVIRONMENTAL CONDITIONS

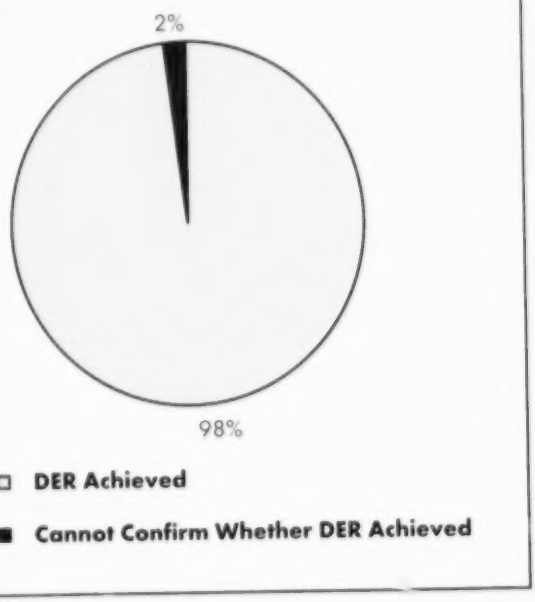


Figure 14 shows the relative proportion of environmental conditions that were found to be effective. Overall, this figure shows that the majority of environmental conditions are effective in obtaining the desired end result (DER). This is an outcome of NEB internal initiatives to track the reasons why past conditions could not be confirmed to be effective and to develop standardized conditions and guidance for writing effective non-standard conditions.

Non-accord Lands

On Canada's non-accord, or frontier, lands (lands not subject to a federal/provincial shared management agreement), conservation and safety officers inspected geophysical and drilling programs and production operations of the companies to confirm compliance with the Board approved program and relevant regulations. Occupational safety and health matters are also considered during these inspections. In 2005, conservation and safety officers conducted 51 inspections of activities and facilities on non-accord lands. All non-compliances with the applicable regulations observed during these inspections were corrected within 14 days.

Management System Audits

The NEB audits the management systems of NEB-regulated companies to evaluate compliance with the NEB and COGO Acts, the *Canada Labour Code*, Part II, relevant regulations, and a company's own policies, practices and procedures consistent with a management system. Through document review, interviews with company staff and onsite verification, NEB staff evaluate a company's compliance with relevant regulatory requirements and management system processes and procedures. An audit typically includes evaluation of a company's design and construction, pipeline integrity management program, emergency preparedness and response program, safety program and environmental protection program.

During 2005, the Board continued to develop and implement its management system audit program, which included defining planning processes, program implementation elements (e.g., work instructions, job descriptions and training requirements), performance measures and self-assessment procedures. The initiative was to continually improve the audit program through analysis of results from previous audits and an assessment of the Board's management system audit program policy, goals, objectives, processes and procedures.

In 2005, the NEB conducted one new audit and closed 13 previously conducted audits and 214 Findings. Audited

companies file Corrective Action Plans (CAP) with the Board that address each Finding. The CAP must be completed and verified before a Finding can be officially closed out. To date, audited companies have completed corrective actions for over two thirds of the Findings, indicating that the audit program and follow-up procedure are supporting the Board's mandate for protecting the public, employees and the environment.

The NEB also conducts financial audits of regulated companies, as discussed in the section on *Application Highlights*. In the course of examining a company's financial matters, these audits may also touch on safety or environmental matters pertaining to facility operation.

Integrated Compliance

In late 2004, the NEB began the Integrated Compliance Project to support a smart regulation approach to coordinating application, audit and inspection processes. The first steps in the project were to develop a program framework, and to improve the Board's ability to use the compliance data that is currently collected. This will enable the Board to better understand the safety and environmental issues and trends affecting NEB-regulated facilities and improve risk-based decisions about application assessment and compliance (e.g., inspections, audits) work planning.

INCIDENTS AND EMERGENCIES

Emergency Management

The NEB's primary role during an emergency situation is to monitor the company's response and ensure all reasonable actions were taken to protect employees, public safety and the environment. The NEB also verifies that regulated companies have adequate and effective emergency management programs that mitigate the impacts associated with an emergency situation.

Regulated companies are required to provide current and up to date versions of their emergency response plans to the NEB for review. In 2005, the NEB undertook the development of its own Emergency Management Program which establishes how the NEB prepares for, and responds to, incidents and emergencies at NEB and COGO Act-regulated facilities. The new program will be in place in 2006.

The NEB encourages and participates in tabletop and full-scale emergency response exercises sponsored by pipeline companies. In 2005, the Board expanded this activity to include participation in four exercises for companies operating under the COGO Act. During 2005, the NEB conducted field responses to seven emergencies and participated in seven exercises, two of which were planned by the NEB. The exercises conducted by the NEB focused on production activities in the arctic and on pipeline operations within populated areas in Ontario. One of the primary goals of these exercises was to develop working relationships between response agencies at all levels of government in advance of an actual emergency situation. The exercises provided NEB staff with a wealth of data on our Emergency Response Procedure as well as useful feedback from participants. In addition, participants unanimously agreed that the exercises provided value to their own organizations and should be conducted at regular frequencies to ensure mutual understandings of respective roles.

Incidents

The NEB requires that certain events (defined as "incidents") be reported to the NEB. The purpose of this reporting is to provide the Board with the information necessary to determine the appropriateness of the companies' response to events which could have adverse effects on safety, the environment or the security of facilities. In addition, reporting provides the NEB with the opportunity to investigate, or, when appropriate, initiate an emergency response. When investigation determines that corrective actions are required, the Board ensures they are taken, either by the company, or by the industry as a whole.

The following incidents must be reported to the NEB as they occur:

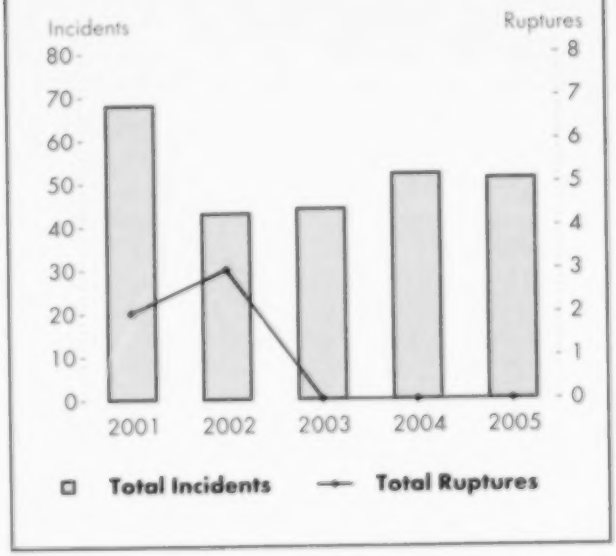
- the death or serious injury of a person;

- a significant adverse effect on the environment;
- an unintended fire or explosion;
- the unintended or uncontained release of low vapour pressure hydrocarbons in excess of 1 500 litres;
- the unintended or uncontrolled release of gas or high vapour pressure hydrocarbons;
- the operation of a pipeline beyond its design limits as determined under CSA Z662, CSA Z276 or any operating limits imposed by the Board; and
- within a processing plant, any occurrence that results or could result in a significant adverse effect on property, the environment or the safety of people.

In 2005, 50 incidents were reported to the NEB compared with 52 in 2004, and 49 in 2003 (Figure 15). The slight increase in reported incidents in recent years can be attributed to the Board's efforts to ensure that regulated companies understand their reporting obligations. The NEB is in the process of revising reporting requirements in an effort to achieve even greater compliance.

The NEB has a target of zero ruptures on the pipelines it regulates. The year 2005 marks the third consecutive year in which there have been no pipeline ruptures. This achievement can be attributed to the effectiveness of the integrity management programs (IMPs) implemented by companies over the past 10 years. In 2005, 15 meetings were held with the regulated companies to discuss their IMPs. The NEB was the first regulator in North America to require companies to have documented IMPs, introducing the requirement in the OPR-99. Since then, IMPs have become universally accepted in the global pipeline industry. Details of ruptures that have occurred on NEB-regulated pipelines dating back to 1992 are available at www.neb-one.gc.ca/safety/PipelineRuptureData/index_e.htm.

FIGURE 15: PIPELINE INCIDENTS AND RUPTURES 2001 TO 2005



In 2005, on non-accord frontier lands, the total number of hazardous occurrences, as defined by the *Oil and Gas Occupational Safety and Health Regulations* under the *Canada Labour Code* Part II, was 48, up by 14 from 2004. Thirty-eight of these hazardous occurrences were reportable spills, four were equipment failures, and five were disabling injuries. The disabling injuries increased from three in 2004 to five in 2005. Due to a proportional increase in hours worked from 2004 to 2005, the frequency of disabling injuries remained stable at 2.72 per million hours worked.

Spills and Releases

In 2005, reported incidents included 40 gaseous and liquid releases. This is up slightly from 37 releases in 2004 and 28 releases in 2003. The 40 reportable releases in 2005 included 20 natural gas releases (of any volume, sweet or sour), 13 low vapour pressure liquid hydrocarbon spills greater than 1 500 litres and five high vapour pressure liquid hydrocarbon releases such as natural gas liquids or propane. The remaining two releases were of acid gas and liquid sulphur. Four of the gas releases and two of the liquid

hydrocarbon spills in 2005 resulted from a failure of the pipe body. The remainder were associated with leaks from piping connections or tank openings. All but one of the liquid spills were contained within company property (such as pump stations or terminals) or pipeline rights-of-way.

In 2005, there were two hydrocarbon spills greater than 100 000 litres from NEB-regulated pipelines and facilities. The first occurred on 1 February 2005 when a fitting came loose during planned maintenance on a 30 000 cubic metre storage tank at Enbridge's Edmonton Terminal. All crude oil released during this event (about 950 cubic metres) was contained within the bermed area surrounding the tank, minimizing the environmental effect.

On 15 July 2005, Terasen identified a leak from its 508-mm diameter liquid hydrocarbon transfer line between its Sumas Mountain tank farm and Sumas Mountain pump station in Abbotsford, British Columbia. The leak resulted in an estimated release of 246 cubic metres of crude oil to a local wetland and creek. As of December 2005, the bulk of soil, sediment and surface water remediation was complete. Planning is underway for site restoration and longer-term monitoring and management of the site.

The NEB's response to hydrocarbon spills includes follow-up to confirm that site remediation is carried out. The NEB is currently working to formalize this process. Tools are being developed to enable the NEB to more consistently and efficiently track and manage spill site remediation files.

On non-accord frontier lands, reportable releases were up about 15 percent from 33 releases in 2004 to 38 in 2005, which echoes a 68 percent increase in the reported hours of exploration and production activity from 2004 to 2005. The 2005 releases included one liquid hydrocarbon spill greater than 1 500 litres, 11 other liquid releases greater than 1 500 litres, and one sour gas release.

Landowner Complaints

The NEB has been tracking landowner complaints related to environmental and rights[5] issues since April 1999. The Board's Landowner Complaint Resolution Program has evolved over the last six years in response to industry and landowner feedback.

In 2005, the Board received 20 landowner complaints:

- three of these were related to safety concerns about NEB-regulated facilities and activities and compliance with commitments and regulatory requirements;
- 12 were related to protection of the environment; and
- five were related to concerns about the rights of those affected.

More information on the Landowner Complaint Resolution Program and the associated Service Standards, introduced in 2005, is presented in the *Engaging Canadians* section.

TECHNICAL EXPERTISE

The NEB's mandate includes providing expert technical advice to Parliament and other government departments and agencies about energy matters. As well, in a variety of forums the Board provides many different agencies with information and expert technical advice on a wide range of regulatory and energy matters.

During 2005, the NEB hosted foreign delegations and provided overviews of the Canadian regulatory framework. The sessions provided an exchange of information and contributed positively to the building of international perspectives on regulatory subjects. Two examples of delegations to the Board were:

5. The rights protected relate to activities undertaken by a company over the life of the NEB-regulated facility, which means from the pre-application stage to abandonment of that facility. The consideration of rights may include, but is not limited to, service of notices, consultations, an opportunity to be heard by the Board, access to information, communication, reclamation, safety and protection of the environment.

- the MHI-Nippon-Itochu mission (September 2005); and
- the Unipec/Sinopec delegation (August 2005).

The Board believes it is important to share its expertise nationally and internationally. Consequently, the NEB is active in the organization of, and has made presentations at, major industry events including:

- the International Pipeline Conference (held every 2 years with the next event taking place in September 2006);
- the Banff Pipeline Workshop (last held in April 2005);
- the United Nations Economic Commission for Europe forum on pipeline accidents (last held in Berlin in June 2005);
- the Rio Pipeline Conference (last held in October 2005); and
- the CSA Z662 Biennial Forum (held in Calgary in November 2005).

The NEB holds co-chair positions on the organizing and technical committees planning the International Pipeline Conference to be held in Calgary in September 2006. The Board is also actively involved in the American Society of Mechanical Engineers Pipeline Systems Division, an international organization dedicated to the dissemination of pipeline technology throughout the world.

Relevant Canadian standards are incorporated by reference into the Board' regulations. The Board is actively engaged in committee work in support of the CSA Z662 Standard on Oil and Gas Pipelines, CSA Z276 Standard on Liquefied Natural Gas, CSA B51 Standard on Pressure Equipment, and ISO/ TC 67 – Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries.

The NEB has a wide variety of specialized expertise which is applied in many facets of the Board's operations. For example, in 2005, Board staff applied contaminated site expertise to assess progress of remediation and reclamation work associated with the 1996 Yukon Pipelines Ltd. pipeline and facility abandonment, and to work with the company and other regulators toward the eventual successful remediation of the sites.

Research and Development

Research and development in the pipeline industry is international in nature. The Board actively monitors research and development by participating in organizations such as NRCan's Panel on Energy Research and Development and the Materials Technical Advisory Committee of the CANMET Technology Centre in Ottawa, and through interaction with the U.S. Pipeline and Hazardous Materials Safety Administration (formerly the U.S. Office of Pipeline Safety).

The Environmental Studies Research Fund (ESRF) provides funding for environmental and social projects pertaining to decision-making related to petroleum exploration, development and production activities on non-accord frontier lands. The NEB chairs and provides technical and administrative resources for the ESRF Management Board, which includes members of industry, the government and the public. In 2005, the Management Board approved 23 new studies, continued to provide funding to others that were previously approved, and participated in updating the CSA Standard for Offshore Structures. ESRF reports can be ordered through the ESRF Internet site at www.esrfunds.org.

ECONOMIC EFFICIENCY

One of the NEB's corporate goals is that Canadians derive the benefits of efficient infrastructure and energy markets as a result of NEB actions. There are three main components to the Board's economic regulation program:

- efficient energy transportation infrastructure;
- efficient and informed energy markets; and
- efficient and effective regulatory processes.

"Canadians benefit from efficient energy infrastructure."

EFFICIENT ENERGY TRANSPORTATION INFRASTRUCTURE

The Board influences the energy transportation system through its decisions and orders on pipeline facilities and tolls, and on international power line facilities. With respect to the pipeline infrastructure, the Board relies on three measures to assess the functioning of the system:

- adequacy of pipeline infrastructure;
- shipper satisfaction with services; and
- the ability of pipelines to attract capital to maintain and finance the system.

The Board monitors transportation markets for the utilization and adequacy of pipeline capacity, including monitoring the degree of apportionment on major oil pipelines. For energy markets to work well there has to be adequate transportation capacity to move crude oil, refined products, natural gas and natural gas liquids from producing areas to the end-users. When there is adequate transportation capacity between the production and consuming market regions, commodity prices will be connected and the price differential will be less than or equal to the cost of transportation between the two points.

Crude Oil

A lack of adequate oil pipeline capacity occurs when shippers request transportation of more oil or oil products than the pipeline can carry. This normally results in a situation referred to as apportionment, under which each of the shippers that requested a volume is "apportioned" a share of the available capacity.

In 2005, Enbridge Pipeline operated at about 74 percent of capacity, with the actual throughput averaging 215 900 m^3/d (Figure 16). Although overall capacity was adequate, growing supply of heavy crude production and declining light crude production resulted in a tightness of heavy crude capacity. In response, in November Enbridge initiated a swap in service between Lines 2 and 3. This swap will bring about a net gain of 39 000 m^3/d of heavy oil capacity by converting

Line 3 from light oil service to heavy oil service and a net loss of 18 400 m^3/d of light capacity by converting Line 2 from heavy oil to light oil service. There was some apportionment on Enbridge's Line 9[6] in the beginning of the year but it operated, on average, at 80 percent of capacity throughout the year.

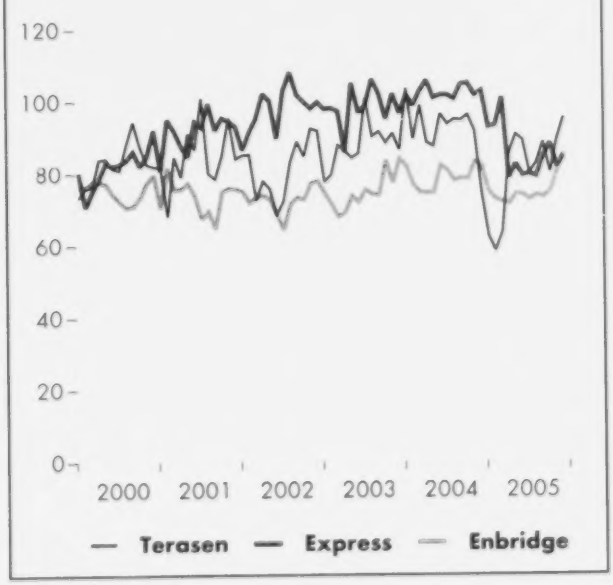
In the first quarter 2005, Enbridge filed two applications for approval to recover tolls in conjunction with two pipeline reversal projects in the U.S. These projects resulted in the extension of oil transportation service into new markets south of Chicago and into the U.S. Gulf Coast, respectively, and will help Canadian producers market the growing supply of heavy crude oil. For more details see *Application Highlights*.

The Terasen Pipelines (Trans Mountain) Inc. (TPTM) system operated at around 95 percent of capacity based on a combined light and heavy crude capacity of 35 750 m^3/d. Measuring throughput strictly against nameplate light crude oil capacity (Figure 16), TPTM operated at 78 percent. However, apportionment has been occurring on this pipeline as an increase in transportation of heavier crude volumes decreased available light capacity. In 2005, the Board approved a capacity expansion of 5 560 m^3/d, which should help to alleviate the apportionment issue on the TPTM system. For more details see *Application Highlights*.

Express Pipeline Ltd.'s capacity expansion of 17 500 m^3/d to 44 800 m^3/d was completed in April 2005. Following the expansion, the line operated on average at 85 percent capacity (Figure 16).

Because of the growing interest in non-conventional oil sands supply, which continued throughout 2005, further expansion of oil sands development is expected. Therefore, the NEB expects to receive more applications for oil pipeline expansions to accommodate this growth and mitigate potential oil pricing disconnects.

FIGURE 16: OIL PIPELINE CAPACITY UTILIZATION (PERCENT)



Natural Gas

In contrast to oil production, natural gas production has been fairly constant since 2001, while Alberta's consumption of natural gas has been increasing. Hence, there has generally been adequate capacity on natural gas pipelines to transport gas from the WCSB to markets in Canada and the U.S.

Figure 17 shows the basis, or the difference in gas prices between the Alberta border and the Dawn delivery point in southwestern Ontario. It also compares the price difference with the firm service toll (including fuel costs) between these two points on the TransCanada Pipelines system, the largest natural gas transmission system in Canada. The fact that the price difference is typically lower than the firm service transportation toll shows that there is adequate capacity in place. The Board tracks similar charts for other Canadian gas pipeline corridors and is satisfied that there is generally sufficient natural gas pipeline capacity.

6. Enbridge's crude oil pipeline from Montreal, Quebec to Sarnia, Ontario

FIGURE 17: COMMODITY PRICE DIFFERENTIALS
(DOLLARS PER GIGAJOULE)

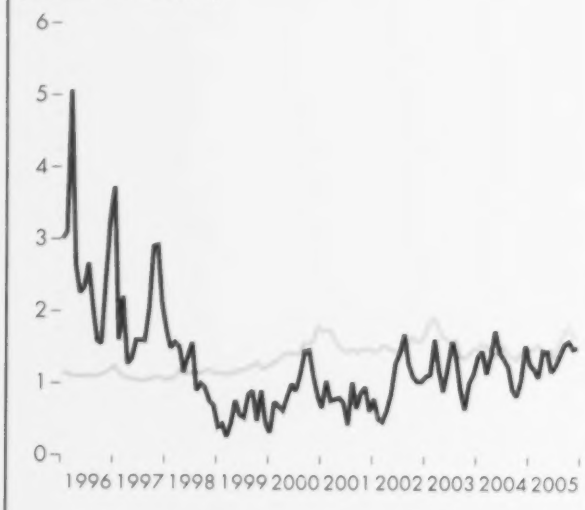
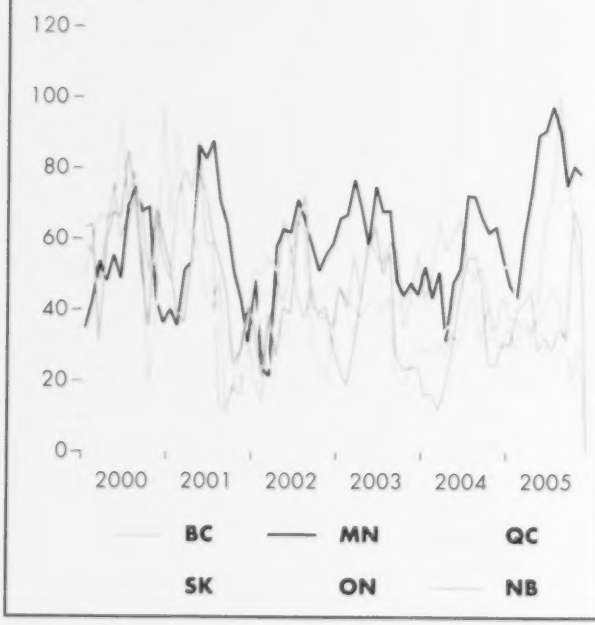


FIGURE 18: EXPORT AND IMPORT TRANSMISSION CAPACITY VERSUS UTILIZATION (PERCENT)



Electricity

Adequate electric power transmission facilities support functioning electricity markets by providing access to multiple generation sources, enabling inter-regional trade, and enhancing reliability. Over the last few years, transmission infrastructure in Canada has had sufficient capacity to enable exports and imports as illustrated by the percent of capacity utilization on the system (Figure 18). In 2005, there were two applications filed with the Board concerning transmission infrastructure. The details are available in the *Application Highlights* section.

Pipeline Services Survey

In February 2005, the NEB conducted a survey of shippers on 10 major NEB-regulated pipeline companies. The objective was to get feedback on the level of satisfaction with the services provided by major pipelines and the Board's role in creating an appropriate economic regulatory environment. In May 2005, the Board published a summary of the aggregate results, which included the industry average and distribution of responses for each question and a summary of some major themes. It is available at www.neb-one.gc.ca/Publications/SurveyResults/PipelineServicesSurveyMay2005_e.htm.

The key results of the survey were:

- overall, shippers are reasonably satisfied with services provided by pipelines and the NEB;
- physical reliability of pipeline operations was rated highest by shippers; and
- toll competitiveness was rated lowest.

In addition, in the *Canadian Hydrocarbon Transportation System*, published by the Board in August 2005, the Board concluded that NEB-regulated pipeline companies are financially sound. While recognizing that pipeline companies have not had to raise large amounts of capital in recent years, the Board's survey of the investment community revealed that it believes pipeline companies

should have no difficulty in raising capital to maintain their systems and finance most major projects at this time.

Overall, the survey found that the hydrocarbon transportation system functioned very well in 2005, as it reliably delivered over $100 billion of oil, petroleum products, natural gas and natural gas liquids to Canadians and export customers.

EFFICIENT AND INFORMED ENERGY MARKETS

For markets to work well, market participants require access to reliable unbiased information. The Board strives to assist the market by providing data and analysis on a wide range of topics, including energy export volumes and prices; developments in natural gas, oil and electricity markets; assessments of the supply and future deliverability of natural gas and oil; and periodic long-term outlooks for Canada's energy future.

The Board continually monitors Canadian energy markets to ensure that Canadians have access to Canadian-produced oil, natural gas and electricity on terms and conditions that are no less favourable than those available to export customers.

Crude Oil

In 2005, the crude oil market functioned so that Canadians had access to Canadian crude oil on price terms at least as favourable as export customers (Figure 19).

Natural Gas

In 2005, domestic prices at AECO-C, the main pricing point for natural gas in Alberta (when netted forward by adding the transportation cost to the Alberta border) were usually equal to or lower than natural gas prices at export points in eastern Canada (when netted back to the Alberta border) (Figure 20). This confirms that Canadians are paying no more for natural gas than export customers for gas purchased in Alberta and suggests economic efficiency in the natural gas market.

FIGURE 19: LIGHT CRUDE OIL EXPORT AND POSTED PRICE AT EDMONTON (DOLLARS PER CUBIC METRE)

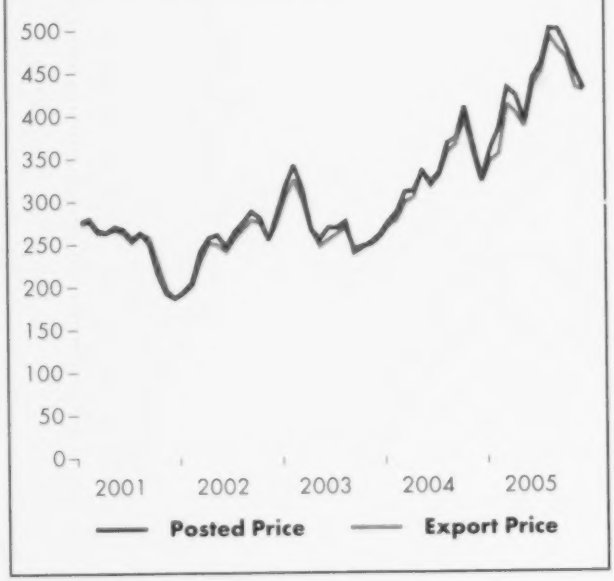
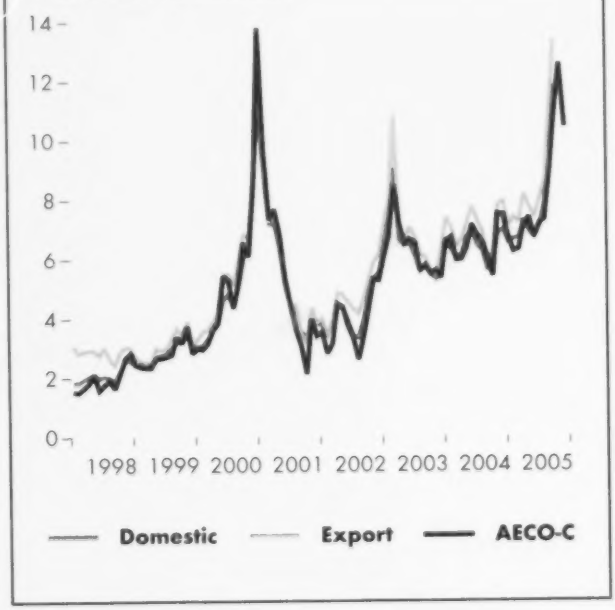


FIGURE 20: EASTERN EXPORT AND DOMESTIC GAS PRICE AT THE ALBERTA BORDER (DOLLARS PER GIGAJOULE)



The relatively small number of buyers and sellers in the British Columbia and Maritimes gas markets presents a greater challenge for monitoring the equivalency of domestic and export natural gas pricing. The NEB continues to track prices and monitor these markets to ensure economic efficiency prevails.

Electricity

The Board also monitors electricity markets, although this presents some challenges because of the regional nature and operational structure of electric power markets. However, residential electricity prices are generally considerably lower in Canada than in nearby cities in the United States.

Energy Market Reports

In its role of monitoring energy markets and providing information that helps Canadians and suppliers make informed decisions, the Board prepares several publications and statistical reports that pertain to all major energy commodities including oil, natural gas, natural gas liquids and electricity. Where appropriate, the Board has included recommendations to decision-makers on issues relevant to the analysis. Stakeholder and public input is used to develop and improve the NEB's ongoing Energy Market Assessment (EMA) program. In 2005, the following EMA reports were produced:

- *Outlook for Electricity Markets 2005-2006* provides a discussion and analysis of generation, demand, prices, infrastructure additions, and inter-regional and international trade for the electricity market. It also includes an update of electricity industry restructuring activities in Canada and identifies and discusses current issues that may have a long-term effect on the Canadian electricity sector.

- *Short-term Outlook for Canadian Crude Oil to 2006* presents an 18-month outlook on prices, supply and markets for Canadian crude oil and petroleum products. It identifies recent developments and existing opportunities and challenges facing the oil industry.

- *Short-term Canadian Natural Gas Deliverability 2005-2007* describes the NEB's estimate of deliverability over the next two years. Deliverability of conventional gas in western Canada is expected to decline slightly, but should be more than offset by growing output of NGC. Deliverability of natural gas from the east coast offshore is expected to remain relatively stable until 2007 when a compression increase should boost output. Overall, Canadian deliverability is expected to increase by roughly three percent over the period.

- *Short-term Outlook for Natural Gas and Natural Gas Liquids to 2006* is the first EMA that presents a combined short-term analysis and outlook for natural gas and NGLs. The report indicates that Canadians will be facing high and volatile natural gas prices over the outlook period. While high gas prices have benefited Canadian economic growth, increases in energy costs present a challenge for consumers and the industrial sector, including both the NGL extraction and petrochemical sectors.

- *Alberta's Ultimate Potential for Conventional Natural Gas* (joint study with EUB) estimates the total potential of marketable conventional gas using the improved geological understanding obtained through the almost 25 percent increase in wells drilled since the base year of the NEB's last study.

- *Canadian Hydrocarbon Transportation System: Transportation Assessment* provides an assessment of how the Canadian hydrocarbon transportation system is currently functioning and sets out the framework the Board will use for future assessments.

EFFICIENT AND EFFECTIVE REGULATORY PROCESSES

The NEB enables regulated companies to develop responsible infrastructure through efficient and responsive regulatory processes. The NEB works to provide a transparent and predictable regulatory system in keeping with the federal government's Smart Regulation strategy and the NEB's commitment to goal-oriented regulation. The NEB is committed to working with other regulatory agencies to harmonize and rationalize regulatory processes and seeks feedback from stakeholders to help it be proactive in providing fair and timely outcomes.

In 2005, the Board continued to move forward with its approach to smart regulation by:

- advancing the use of goal-oriented regulation;
- processing applications in an efficient and timely manner and diligently fulfilling its responsibility to protect the public interest;
- involving Canadians in numerous forums about regulatory development and energy markets;
- reviewing its processes, engaging in dialogue with stakeholders, clarifying expectations, implementing new approaches, and preparing for major applications;
- providing tools for resolving differences outside of hearings and court proceedings (such as Appropriate Dispute Resolution); and
- negotiating with other agencies to ensure that regulatory processes are harmonized to minimize duplication.

Service Standards

In today's results-based management environment, service standards have become an essential tool for building effective citizen-focused service in organizations. In 2005, the NEB developed and published service standards (available at www.neb-one.gc.ca/publications/servicestandards_e.pdf). Service standards have been defined for many of the NEB's regulatory functions and associated services so clients know what they may expect from the NEB. The service standards identify specific delivery targets, or timelines for the following areas:

- release of hearing decisions - 80 percent of its Reasons for Decisions will be completed within 12 weeks following a public hearing ;
- authorizations for export of oil, gas, and natural gas liquids and import for natural gas - two working days ;
- electricity export permits - 80 percent completed within 75 days;
- COGO Act and CPR Act applications - the Board will render a decision within 90 calendar days from the day that all information is available to begin the evaluation;
- audits – OPR-99/financial – 80 percent of draft audit reports will be sent to the audited company within eight weeks of field work completion;
- landowner complaints – 80 percent will be resolved within 60 calendar days of receiving the initial complaint (subject to complexity of the complaint); and

- non-hearing Section 58 application cycle times- based on complexity, applications will be assigned a category and estimated date for release of decision (based on 80 percent of all applications) range from 40 calendar days for less complex applications to 120 calendar days for applications with very complex issues.

In addition, the service standard established for responses to general correspondence is 10 working days. The service standard for requests to the Board's library is one working day.

In January of 2005, the Board created three categories of service standards for non-hearing applications pursuant to Section 58 of the NEB Act. These categories depict the range in complexity for those applications. To further provide regulatory clarity, the Board contacts the Applicant within ten days of receiving the application to advise them of the category assigned and expected date for the release of a Board decision. In 2005, the following results were achieved with these new service standards (Table 10).

The Board's target of 80% for Category A applications was not achieved due to resource constraints and the need to train new staff. The Board did, however, maintain an average cycle time of 34 days for that category of applications. The feedback from applicants on the implementation of these service standards has been very positive.

TABLE 10: SECTION 58 SERVICE STANDARDS FOR NON-HEARING APPLICATIONS

Category	Category Description	Service Standard	No. of Applications in 2005	Results Achieved	Average Cycle Time
A	Minor complexity of issues with no third party interests	80% completed within 40 calendar days	13	77% were completed within 40 calendar days	34
B	Moderate complexity of issues with possible third party interests	80% completed within 90 calendar days	42	86% were completed within 90 calendar days	69
C	Major complexity of issues with likely third party interests	80% completed with 120 calendar days	1	86% were completed within 120 calendar days	120

ENGAGING CANADIANS

"The NEB fulfills its mandate with the benefit of effective public engagement."

Public participation enhances the Board's ability to make decisions in the public interest. Over the past year, the NEB has continued to increase and improve opportunities for public participation with respect to applications, regulation development, energy studies and emerging issues in different regions of the country. As a result of the Board's desire to have the best information available to make decisions in the public interest, as well as increasing public expectations to be informed and involved about matters that affect them, the Board's processes continue to evolve to meet participant needs.

At the NEB, engagement involves a broad spectrum of activities including exchanging information about Board matters, involving stakeholders in revising guidelines and regulations, and resolving matters between regulated companies and landowners or other parties. In 2005, the Board initiated a project to review and update the Board's objectives with respect to public and aboriginal engagement and to develop a framework for evaluating the results of engagement efforts. The evaluation framework will be completed in 2006 and will be a key tool to assist the Board in ensuring its engagement efforts meet stakeholder needs and contribute to outcomes in the public interest.

PROACTIVE ENGAGEMENT INITIATIVES

Building Engagement Approaches

In November 2005, representatives from the NEB travelled to north-central British Columbia to host open houses and share information about the Board's mandate and hearing processes. It was the Board's intention to conduct these sessions prior to the filing of any pipeline or facilities application. The timing was in response to stakeholder feedback that they would be better equipped to participate effectively in hearings if they were more knowledgeable about the NEB and its processes before the hearing occurred.

In December, the Board held a pre-hearing planning conference on the Mackenzie Gas Project in several communities in the Northwest Territories. The purpose of the conference was to hear people's views on the preliminary hearing schedule, as well as to hear comments on the overall hearing process.

Understanding how the public can and wants to be involved with NEB processes helps the Board identify effective public engagement options. In 2005 the Board asked for feedback on several NEB initiatives such as the development of goal-oriented Drilling and Production Regulations, the proposed changes to the regulation of operation and maintenance activities of NEB-regulated facilities and the electricity cost recovery review. As well, stakeholders were asked to specify how they would like to provide comments. It has been the Board's experience that participants generally value the chance to present their views in

a more informal setting with Board staff and that staff find face-to-face meetings with stakeholders particularly helpful for improving their understanding of stakeholder concerns and an efficient way to hear perspectives on process issues.

The NEB's mandate also includes providing expert technical advice to Parliament and other government departments and agencies about energy matters. One example of this is the NEB's appearance in February 2005 before the Parliamentary Standing Committee on Environment and Sustainable Development, which was studying Canada's implementation of the Kyoto Protocol. This address can be viewed at www.neb-one.gc.ca/newsroom/Speeches/2005/RSClimateChangeKyotoProtocolSCESD2005_02_24_e.htm.

This year, the NEB continued to adapt and refine existing tools to enhance public participation in its processes. To support this approach, employees across the organization have been encouraged to take training to develop the necessary skills to lead efficient and productive group sessions.

Increasing Collaboration – Alternative Processes

Over the past year, the NEB has had considerable success using alternative methods (e.g. alternatives to hearings) to help people clarify issues and resolve their differences. The NEB recognizes that less formal engagement methods (e.g. face-to-face meetings) reduce Board processing times and that discussions with stakeholders outside of or before the hearing process are more likely to generate new ideas and potential consensus among parties. The NEB's ADR team continues to provide support for unresolved land matters, promote awareness of collaborative approaches, build internal ADR capacity, and implement its evaluation framework to ensure its services continue to meet the evolving needs of Board stakeholders.

Feedback on the NEB's collaborative services offered at conferences, workshops and other meetings throughout 2005 has been consistently positive. Staff and external parties value the efficiency of well-planned, facilitated meetings, and there is an increased demand for skilled staff to plan and facilitate meetings and workshops on a wide range of issues. In 2005, the ADR team facilitated and co-facilitated sessions at several workshops and conferences to help parties clarify objectives and develop appropriate processes and to engage participants. For example, the team facilitated the LNG Safety Workshop held in Montreal, helping the attending regulators and authorities gain a better understanding of issues and interests related to LNG.

Enhancing Aboriginal Engagement

To enhance the ability of the Board to participate in Aboriginal engagement, the Aboriginal Engagement team organized a number of initiatives over the past year. These included cultural awareness training available to all staff, regularly posted fact sheets on aboriginal history for NEB employees, improvements to a community profile database, celebrating Aboriginal Awareness Week, and advisory services for projects with potential aboriginal concerns.

In 2005, a Northern Engagement Research Project was initiated to help the NEB refine its public engagement approaches to improve responsiveness, information sharing and stakeholder contributions.

UNDERSTANDING PUBLIC ENGAGEMENT NEEDS

The NEB is able to offer effective public engagement options because it takes the time to understand how individuals want to participate in its processes. Through surveys, meetings and ongoing dialogue, the Board can better understand the needs of its stakeholders.

Survey Feedback

Web site Survey

In April 2005, the NEB launched a survey to gather feedback for redesigning its Internet site. The survey was posted on the NEB's Internet site for three weeks and covered topics such as reasons for visiting the site, readability and reliability of content, navigability and visual appeal. The NEB used the survey results, internal

focus groups, a telephone survey and a workshop session to identify NEB Internet site users' needs and lay the foundation for a project to redesign the site that will continue through 2006.

Post-Hearing Surveys

In 2005, the Board held six public hearings. Three were conducted through written proceedings and three were oral proceedings. From the feedback received, all participants agreed or strongly agreed with the statement "Overall, I was satisfied with the NEB."

Board Visits

In December 2005, Board Members traveled to the Maritimes to meet with more than a dozen parties representing a variety of interests. Over a five-day period, the Board engaged in dialogue with aboriginal groups, regulated companies, special interest groups, government departments and provincial regulatory bodies.

The meetings were designed as an informal opportunity to discuss topics of mutual interest. Some of the topics discussed were effective engagement and what it looks like, opportunities for regulatory cooperation between federal and provincial bodies, and the Board's roles and responsibilities and how it carries those out.

The Board was pleased with the dialogue that was generated. Parties expressed an appreciation for the visit and mentioned that these meetings should be held more frequently, or on a regular basis.

ADDRESSING LANDOWNER COMPLAINTS

The NEB monitors emerging technical and regulatory issues in order that its regulatory efforts are proactive, strategic and efficient. To increase its understanding of current issues related to lands and landowner engagement, the Board led a landowner engagement session at the NEB workshop in June 2005. About 75 delegates participated with several Board Members and staff to discuss topics such as creating and maintaining relationships, successes and challenges, service standards, NEB decision processes, knowledge management, and emerging issues. Key themes from the discussion sessions included a desire for increased clarity and transparency from the Board on the status of complaints and the need to encourage and support open communication with all parties. This information was documented as part of the 2005 NEB Workshop proceedings and has been tracked for consideration when developing or improving programs.

The NEB presented the landowner complaint service standards put in place on 1 April 2005 at the workshop (Table 11).

TABLE 11: LANDOWNER COMPLAINT RESOLUTION PROGRAM - SERVICE STANDARDS

Respond With Initial Course of Action	100% within 10 calendar days
Resolve The Complaint	80% within 60 calendar days
Circumstances Affecting Resolutions[7]	Formal Board Process; Weather or Seasonal Factors

Eleven landowner complaints were received since April when the service standards were established. Ten of the 11 complaints have been closed. All 11 complaints (100 percent) met the 10-day response service standard. Nine of the ten complaints closed (90 percent) were completed within 60 days of receipt.

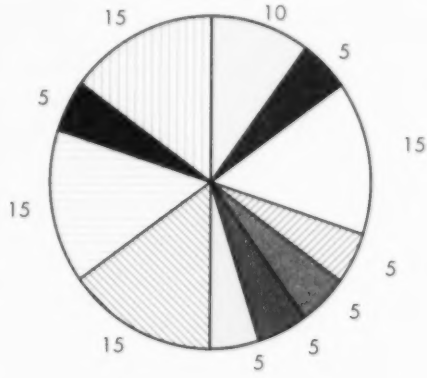
As part of its monitoring program, the NEB also tracks the type of landowner complaints (Figure 21).

Of the 20 landowner complaints received, the majority were resolved through inspections and staff meetings with the landowners and company representatives. Others were resolved by a Board decision.

In 2005, the NEB developed and implemented a new approach to seek feedback from landowners and company representatives regarding the resolution of landowner complaints. The Board now sends a comment card to

7. Twenty percent of landowner complaints that are not resolved within 60 calendars days are primarily affected by those circumstances listed above.

FIGURE 21: TOPICS OF COMPLAINTS RECEIVED IN 2005



participants following the closure of a file. This new tool will help the Board assess its service standards for landowner complaints and to measure and improve the Board's landowner complaint program.

COMMUNICATING WITH CANADIANS

Publications and Information Tools

Each year the NEB produces publications for its various stakeholders in both official languages. For details about documents the NEB publishes, see Supplement III. These publications are mailed to key stakeholders and are available through the NEB's Internet site and Library. Each publication contains a comment card, with postage paid, to provide the NEB with feedback.

The Board also maintains a toll-free number and fax for the use of Canadians. In 2005, 5 323 calls were received through the toll-free service.

The Board published 33 news releases over the past year for distribution to a variety of media venues as another means of getting information out to the public. These releases are also available at www.neb-one.gc.ca/newsroom/releases/index_e.htm.

EFFECTIVE LEADERSHIP AND MANAGEMENT

"The NEB is effective in leading its people and managing its resources."

The NEB is committed to effective leadership and management that supports a high performance organization that delivers on its commitments. The NEB focuses on accountability in terms of leadership practices and skill development and, in turn, establishes a requirement to define performance standards and measure results.

The NEB has committed to complete the design and implementation of a comprehensive Quality Management System, using the "ISO 9001:2000 Quality Management Systems - Requirements" as a guide. The Board's management system is designed to incorporate setting objectives, measuring and reporting results, reviewing effectiveness and continual improvement of processes. The implementation of the Quality Management System is supported by an enhanced planning and reporting process. In 2005, the NEB reviewed and redesigned processes to ensure its regulatory processes connect effectively in an overall "systems" approach.

During the first half of 2005, the NEB made significant progress in ensuring it has the talent and capacity needed to meet its goals now and in the future. Effective communication with employees about the contribution they can make toward achieving success is critical. Throughout 2005, the Board used a variety of tools to communicate intentions to all NEB staff members. The employee performance management program at the NEB was enhanced so employee performance can be determined using a multi-rater tool that uses consistent methods and rating scales. In addition, the leadership training program made considerable progress.

During the last half of 2005, a tightening labour market and aggressive recruitment by the energy industry created a challenge in recruiting and retaining employees in some areas. This will continue to be a challenge in the coming year. Over the last 5 years, annual turnover was approximately 8%; if current trends continue, the NEB will have an annualized turnover rate next year of 16%. Of particular concern is the impact of turnover at senior levels. Another area of concern is the loss of experienced bilingual capacity. The NEB is in the process of developing options to improve its capacity to attract and retain qualified staff, and where necessary will seek Treasury Board support for changes.

The NEB's Communities of Practice program evolved further in 2005. Many NEB employees are members of discipline-focused networks and communities of practice. The NEB is committed to expanding its capacity as an expert regulator. These groups meet regularly to debate issues relevant to their discipline, discuss best and emerging practices and regulatory direction, and collaboratively develop innovative solutions to challenges.

The NEB is committed to excellence in project management and in 2005 set up a Project Management Office. The first order of business was to put in place

standardized project initiation documents and project charters to ensure alignment with strategic direction and best possible return on investment.

The NEB made significant progress on a Records Renewal Program, which will ensure appropriate capture, storage and use of electronic and paper records. Training, policy and online guidance documents and a new Records and Document Information Management System were implemented.

In 2005, the NEB implemented the first phase of the Commodities Tracking System (CTS), thereby taking a major step forward in providing a secure e-business model for interactions with external stakeholders. This first phase of CTS now enables paperless filing of export and import statistics for NGLs, and future phases will cover all commodities (crude oil, petroleum products, natural gas and electricity). CTS was a successful pilot project for the NEB's e-business framework using "Epass", a shared government service to provide users of online government services with digital certificates so they can reliably identify themselves In future years, the NEB will also use this technology to provide a secure portal for filing applications.

The NEB took the next step in its business continuity preparedness program by implementing a secondary site for the Board's information technology services. This secondary site provides the NEB with access to mission critical business systems and data if the primary site fails. More work is planned in this area to reassess updated business systems and new or expanded business requirements.

NEB EXPENDITURES AND FINANCIAL REPORTING

The NEB's expenditures and staff levels for the last five fiscal years are illustrated in Table 13. The Government of Canada provides the funding for the NEB and recovers about 90 percent of the NEB's operating costs from companies whose facilities are regulated by the NEB. Additional information on the NEB's budgets and plans may be found in the "2004-2005 Main Estimates, Part II" and the "2004-2005 Estimates Part III – Report on Plans and Priorities", both of which are available at www.tbs-sct.gc.ca/est-pre/20042005/NEB-ONE/NEB-ONEr45_e.asp.

TABLE 12: HISTORICAL EXPENDITURES AND STAFFING

Fiscal Year (April 1 to March 31)	Expenditures ($000)	Full-Time Equivalents
2001 - 2002	28 836	281
2002 - 2003	31 232	287
2003 - 2004	31 189	297
2004 - 2005	33 831	300
2005 - 2006	35 471 [a]	306 [a]

(a) Estimate

To meet the Treasury Board's fiscal year end requirements and the cost recovery calendar year requirements, the NEB prepares two sets of annual financial statements. The first set is prepared on a fiscal year period ending 31 March using the accrual basis of accounting in accordance with Treasury Board of Canada Accounting Standards and based on the Canadian Generally Accepted Accounting Principles. These financial statements form part of the Public Accounts of Canada.

In 2004, the Board received a request from industry to review its cost recovery regulations related to electricity. In response to this request, the Board commenced a review process in consultation with the electricity sector. The Board identified the possibility of changing the current cost recovery year that is calendar year based to align with the NEB fiscal year which is 1 April to 31 March. This change would reduce the workload at the NEB and eliminate an entire year-end closing cycle from our schedule. The Board is seeking written comments from all companies under its jurisdiction.

The second set of financial statements, for cost recovery purposes, is prepared on a calendar year period using the accrual basis of accounting in accordance with Treasury Board of Canada Accounting Standards and based on the Canadian Generally Accepted Accounting Principles. These statements are audited by the Office of the Auditor General on an annual basis and are used as the basis for determining the costs recovered in accordance with the *National Energy Board Cost Recovery Regulations.*

Further information on either set of financial statements is available by contacting the NEB. The consolidated financial statements for the Government of Canada can be found at www.pwgsc.gc.ca/recgen/text/pub-acc-e.html. The audited financial statements for cost recovery purposes can be found at www.neb-one.gc.ca/Publications/AuditorGeneralReports/AuditorGeneralReport2004_e.pdf.

NEB AS A SEPARATE EMPLOYER

The NEB has been a separate employer since December 1992. As a Public Service separate employer, the authority to carry out certain personnel management functions has been transferred from the Treasury Board to the Chairman of the NEB. With the transfer of authority comes the responsibility for creating and maintaining an NEB classification system, developing human resource management policies and practices, and collective bargaining.

Although a separate employer, the NEB continues to be bound by federal legislation. The Board is governed by the terms of the *Public Service Employment Act* (PSEA) in respect to promotion and recruitment. Employee–employer relations are subject to the *Public Service Labour Relations Act*. In addition, the NEB is subject to public service constraints and public service wage restraints. Financial matters are governed by the *Financial Administration Act* as administered by Treasury Board. Furthermore, the NEB is bound by the provisions and standards set out in the *Official Languages Act* and the *Employment Equity Act*.

In 2005, the NEB began implementation of the changes associated with the PSEA, which took effect 31 December 2005. While central agencies, including the Canada School of the Public Service and Treasury Board, have responsibility to communicate all changes and provide an education program for management and Human Resources practitioners, the NEB itself had to undertake NEB-specific policy development and change management. The new PSEA will generally provide the NEB with more flexibility and accountability in staffing processes.

COMMUNITY INVOLVEMENT AND SUPPORT

The NEB recognizes the importance of community support and involvement and encourages staff to participate in, contribute to, and volunteer with various agencies, programs and non-profit groups. The Board promotes this in a number of ways, including:

- partnering with employees to support a variety of community agencies through United Way contributions;
- providing gifts-in-kind of used binders and computers to local schools (through the Computers for Schools program) and to other organizations in need of educational supplies;
- encouraging employees to start or participate in various funding drives for local and national agencies; and
- offering staff health and wellness sessions, during which time guest speakers are invited in to speak about current issues, family support, and charity information.

In 2005, NEB staff participated in several initiatives, including the United Way workplace campaign and Adopt-A-Family, with proceeds going to the Discovery House for much needed supplies. Staff also participated in Operation Christmas Child, Amble with Angus for the Calgary Food Bank, the Banff Ekiden Run, the Kananskis 100-mile Relay and numerous other activities to support the local community.

A WEALTH OF EXPERIENCE

CHAIRMAN

Kenneth W. Vollman

A native of Saskatchewan, Mr. Vollman has a Master's degree in Mechanical Engineering from the University of Saskatchewan and is a member of the Association of Professional Engineers of Alberta.

Mr. Vollman has spent his career working in the energy sector gaining his practical experience with oil and gas production while working in the private sector. During his career at the NEB, Mr. Vollman gained experience in energy supply and demand, pipelines, energy regulatory issues and management. In 1998, he was designated as Chairman after serving as a Member and Vice-Chairman.

Over the past 35 years, Mr. Vollman has authored and presented numerous papers at Canadian and international conferences.

VICE-CHAIRMAN

Gaétan Caron

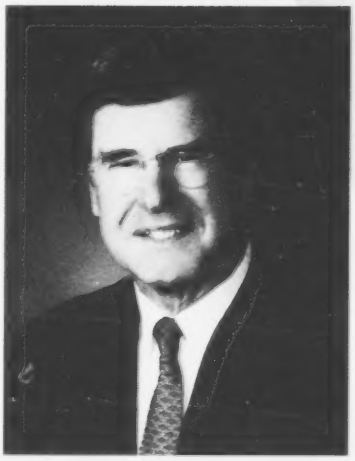
Originally from Québec City, Mr. Caron obtained his Bachelor of Rural Engineering degree from Laval University and his Master of Business Administration degree from the University of Ottawa.

Mr. Caron joined the NEB in 1979, where he has held several senior positions. Prior to his appointment as a Board Member in 2003, he held the position of Chief Operating Officer. He was designated Vice-Chairman in 2005.

Mr. Caron is a member of several organizations including the Association of Professional Executives of the Public Service of Canada, the Quebec Order of Engineers and the Board of Directors of the Calgary United Way.

MEMBERS

Rowland J. Harrison, Q.C.



Originally from Australia, Mr. Harrison has a Master of Laws degree from the University of Alberta and is a member of the bars of Nova Scotia, Ontario and Alberta. He has gained extensive advisory, consulting and research experience in various aspects of energy regulation and policy during his career.

As a Professor of Law at various Canadian universities, Mr. Harrison taught Oil and Gas Law, Advanced Petroleum Law, Constitutional Law and Administrative Law. He has held senior management positions with a number of organizations including

Canada Oil and Gas Lands Administration, the Canadian Institute of Resources Law, the Institute for Research on Public Policy and the Dalhousie Institute of Environmental Studies. Before his appointment to the Board, he was a partner in the Calgary office of Stikeman Elliott, a national and international Canadian law firm.

John S. Bulger

Originally from Manitoba, Dr. Bulger has a Ph.D. in Physical Chemistry from York University in Toronto, as well as a Graduate Management Diploma from McGill University in Montreal. He has experience in procurement, operations, planning, regulatory affairs and providing advice on energy issues.

Prior to being appointed to the Board, he held the position of Senior Manager, Regulatory Affairs at Maritimes and Northeast Pipeline in Halifax, Nova Scotia. He also spent almost 20 years at Gaz Métropolitain in Montreal, Quebec in various senior management positions. He began his career at DuPont of Canada Ltd.

Dr. Bulger is a member of the Chemical Institute of Canada.

Elizabeth (Liz) Quarshie

Originally from Ghana, Ms. Quarshie has a Master's degree in Business Administration from the University of Saskatchewan and a Master of Science degree in Environmental Engineering from Washington State University. She is a member of the Association of Professional Engineers and Geoscientists of Saskatchewan and is a Certified Professional Environmental Auditor.

Ms. Quarshie has more than 15 years experience in the energy sector and has held a portfolio of senior management positions at Cogema Resources Inc. and Cameco in Saskatoon, and directed programs such as occupational health and safety, environmental impact assessments, compliance and corporate affairs. She also has extensive industry experience in project planning and design, development, implementation, monitoring and decommissioning.

Ms. Quarshie also has experience in radiation protection, air pollution control, solid and hazardous waste management, water and wastewater treatment, research and evaluation, environmental management systems, audits and community development.

Deborah W. Emes

Originally from Saskatchewan, Ms. Emes has a Master of Arts in Economics from the University of Calgary and is a Chartered Financial Analyst. She has practical and academic expertise in providing regulatory, economic and market advice.

Ms. Emes has held positions in the public and private sectors, including Manager, Strategic Services for the British Columbia Utilities Commission. She has also taught rate design and cost of capital training seminars for the Canadian Association of Members of Public Utility Tribunals.

Carmen L. Dybwad

A native of Saskatchewan, Dr. Dybwad has a Ph.D. in Regional Planning and Resource Development from the University of Waterloo. She has an educational background in economics as well as practical and academic expertise in public participation, resource development and the electricity sector.

Dr. Dybwad has held several positions with the Government of Saskatchewan and the Saskatchewan Power Corporation, including Manager of Environmental Policy and Planning. Most recently, she was an assistant professor at the University of Regina where she taught classes in ecological economics, sustainable development and public administration.

Dr. Dybwad is a volunteer with the Wood's Homes Foundation and a member of the Alberta Arbitration and Mediation Association.

Patricia McCunn Miller

Patricia McCunn Miller was appointed to the National Energy Board as a full Board Member on May 2nd, 2005 for a seven year term. She is a lawyer, specializing in energy, environment, corporate social responsibility and regulatory matters, and has served as Vice Chair of the National Round Table on the Environment and the Economy (NRTEE). She has also chaired NRTEE Task Forces on Emissions Trading, as well as Energy and Climate Change. Ms. McCunn Miller currently co-chairs the Task Force on Capital Markets & Sustainability. She also sits as a Director of Climate Change Central (C3) in Alberta and chairs C3's Governance Committee.

Ms. McCunn Miller is a former Vice-President of Environment and Regulatory Affairs for EnCana Corporation (formerly PanCanadian Energy) and has also held the positions of Vice-President and General Counsel at Alberta's electric transmission administrator, and General Counsel and Corporate Secretary of the Alberta Petroleum Marketing Commission.

Ms. McCunn Miller, who received a Bachelor of Laws degree from the University of Ottawa in 1982, has been actively involved in numerous organizations as chair or director, including the Canadian Petroleum Law Foundation and the Association of General Counsel of Alberta. She continues to enhance her background in governance issues as a member of the Institute of Corporate Directors (ICD) and has graduated from the ICD Corporate Governance College Directors Education Program.

TEMPORARY MEMBERS

David Hamilton

Originally from Scotland, Mr. Hamilton has a Master's degree in Leadership and Training from the Royal Roads University, Victoria, British Columbia. Mr. Hamilton has more than 30 years of experience working in Northwest Territories in the development of people and communities through both the parliamentary and democratic processes.

Mr. Hamilton was Deputy Minister and Clerk of the Legislative Assembly of the Northwest Territories for 20 years. He also held the appointment as Chief Electoral Officer for the Northwest Territories. Mr. Hamilton administered the first general election for Members to the Legislative Assembly in Canada's two new Territories, Nunavut and the Northwest Territories, following division of the NWT in 1999. Mr. Hamilton participated in the ratification votes for the Gwich'in Land Claim Agreement, the Sahtu Settlement Agreement and the Inuit Land Claim Settlement.

Mr. Hamilton has been involved in the electoral process in Canada for over 30 years and has extensive experience in community development.

Jim Donihee

Mr. Donihee was appointed Chief Operating Officer of the Board on 17 November 2003. Reporting directly to the Chairman, he is responsible for all operational and support functions of the National Energy Board; accountable for the development, execution and delivery of results identified in the Board's Strategic Plan; accountable for business relationships with Canada's energy ministries and to foster strong relationships with all principal stakeholders of the NEB.

Mr. Donihee served in the Canadian Forces for over twenty-seven years as an operational pilot, where he gained leadership experience leading groups ranging in size from 30 to 3000 people in dynamic task and performance oriented organizations. He has extensive experience in process re-engineering and change management. Retiring as Colonel from the Canadian Forces, Mr. Donihee worked in the energy industry where he introduced Knowledge Management and led initiatives that fostered organizational effectiveness, including Knowledge Exchange, leadership development and performance management.

Mr. Donihee earned a Bachelors degree in Business Administration and Computer Science from the Collège Militaire Royal in St-Jean, Quebec. He was awarded the Order of Military Merit by her Excellency the Governor General of Canada, The Right Honorable Adrienne Clarkson.

Mr. Donihee was appointed Temporary Member on May 19, 2005 for a period of two years.

SUPPLEMENT I

LEGISLATION UNDER WHICH THE NEB HAS NAMED RESPONSIBILITY

ACTS

National Energy Board Act
Canada Labour Code, Part II
Canada Oil and Gas Operations Act
Canada Petroleum Resources Act
Canadian Environmental Assessment Act
Energy Administration Act
Mackenzie Valley Resource Management Act
Northern Pipeline Act
Species at Risk Act

REGULATIONS AND ORDERS PURSUANT TO THE *NATIONAL ENERGY BOARD ACT*

National Energy Board Act Part VI (Oil and Gas) Regulations
National Energy Board Cost Recovery Regulations
National Energy Board Electricity Regulations
National Energy Board Export and Import Reporting Regulations
National Energy Board Gas Pipeline Uniform Accounting Regulations
National Energy Board Oil Pipeline Uniform Accounting Regulations
National Energy Board Oil Product Designation Regulations
National Energy Board Onshore Pipeline Regulations, 1999
National Energy Board Order No. MO-62-69
National Energy Board Pipeline Crossing Regulations, Part I
National Energy Board Pipeline Crossing Regulations, Part II
General Order No. 1 Respecting Standard Conditions for Crossings by Pipelines
General Order No. 2 Respecting Standard Conditions for Crossings of Pipelines
National Energy Board Power Line Crossing Regulations
National Energy Board Processing Plant Regulations
National Energy Board Rules of Practice and Procedure, 1995
National Energy Board Substituted Service Regulations
Pipeline Arbitration Committee Procedure Rules, 1986
Regulations amending the National Energy Board Cost Recovery Regulations (21 October 2002)
Section 58 Streamlining Order XG/XO-100-2002
Toll Information Regulations

GUIDELINES, GUIDANCE NOTES AND MEMORANDA OF GUIDANCE PURSUANT TO THE *NATIONAL ENERGY BOARD ACT*

Appropriate Dispute Resolution Guidelines (18 July 2003)

Implications of Supreme Court of Canada Decision on the National Energy Board Consultation with Aboriginal People (3 August 2005)

Consultation with Aboriginal People – Generic Information Request (3 April 2002)

Filers Guidelines to Electronic Submissions (1 December 2004)

Filing Manual (2004)

Filing of Supply Information in Compliance with the Board's Part VI (Oil and Gas) Regulations (16 May 1997)

Financial Regulatory Audit Policy of the National Energy Board (23 February 1999)

Guidance Notes for the *Onshore Pipeline Regulations,* 1999 (7 September 1999)
Amendment I (20 January 2003)

Guidance Notes for Pressure Equipment under National Energy Board Jurisdiction (8 August 2003)

Guidance Notes for the Design, Construction, Operation and Abandonment of Pressure Vessels (3 July 2003)

Guidance Notes for the Design, Construction, Operation and Abandonment of Pressure Vessels and Pressure Piping (3 July 2003)

Guidance Notes for the *Processing Plant Regulations* (28 July 2003) including: Appendix I – Guidance Notes for the Design, Construction, Operation and Abandonment of Pressure Vessels and Pressure Piping (3 July 2003) and Appendix II – Security and Emergency Preparedness and Response Programs (24 April 2002)

Guidelines for Negotiated Settlement of Traffic, Tolls and Tariffs (12 June 2002)

Guidelines Respecting the Environmental Information to be Filed by Applicants for Authorization to Construct and Operate Gas Processing and Straddle Plants, Liquid Natural Gas (LNG) Plants and Terminals, Natural Gas Liquids (NGL), Liquid Propane Gas (LPG) and Butane Plants and Terminals, under Part III of the *National Energy Board Act* (26 June 1986)

Information to be Furnished by Applicants to Import LNG – Letter and Guidance Document (20 September 2005)

Model Conditions for International Power Line Certificates of Public Convenience and Necessity (23 December 2004)

Memorandum of Guidance – Electronic Filing, *National Energy Board Rules of Practice and Procedure, 1995* (21 March 2002)

Memorandum of Guidance – Concerning Full Implementation of the September 1988 Canadian Electricity Policy (Revised 23 January 2003)

Memorandum of Guidance – Fair Market Access Procedure for the Licensing of Long-term Exports of Crude Oil and Equivalent (17 December 1997)

Memorandum of Guidance – Regulation of Group 2 Companies (6 December 1995)

Memorandum of Guidance – Retention of Accounting Records by Group 1 Companies Pursuant to Gas/Oil Pipeline Uniform Accounting Regulations (30 November 1994)

National Energy Board Pre-Application Meetings Guidance Notes (26 February 2004)

Notice of Proposed Regulatory Change 2005-01 – Pipeline Security Management Programs (14 September 2005)

Operations and Maintenance Activities on Pipelines Regulated under the *National Energy Board Act*: Requirements and Guidance Notes (7 July 2005)

REGULATIONS PURSUANT TO THE *CANADA OIL AND GAS OPERATIONS ACT*

Canada Oil and Gas Certificate of Fitness Regulations
Canada Oil and Gas Diving Regulations
Canada Oil and Gas Drilling Regulations
Canada Oil and Gas Geophysical Operations Regulations
Canada Oil and Gas Installations Regulations
Canada Oil and Gas Operations Regulations
Canada Oil and Gas Production and Conservation Regulations
Oil and Gas Spills and Debris Liability Regulations

GUIDELINES AND GUIDANCE NOTES PURSUANT TO THE *CANADA OIL AND GAS OPERATIONS ACT*

Guidance Notes for the *Canada Oil and Gas Drilling Regulations*
Guidelines Respecting Physical Environmental Programs during Petroleum Drilling and Production Activities on Frontier Lands
Notice of Revised Offshore Waste Treatment Guidelines (21 August 2002)

REGULATIONS PURSUANT TO THE *CANADA PETROLEUM RESOURCES ACT*

Environmental Studies Research Fund Regions Regulations
Frontier Lands Petroleum Royalty Regulations
Frontier Lands Registration Regulations
Lancaster Sound Designated Area Regulations
Order Prohibiting the Issuance of Interests at Lapierre House Historic Site in the Yukon Territory
Order Prohibiting the Issuance of Interests at Rampart House in the Yukon Territory

GUIDELINES AND GUIDANCE NOTES PURSUANT TO THE *CANADA PETROLEUM RESOURCES ACT*

Northwest Territories – Nunavut - Guidance Notes for Applicant - Applications for Declaration of Significant Discovery and Commercial Discovery (January 1997)
Applications for Declaration of Significant Discovery and Commercial Discovery – Directly Affected Persons (17 November 2003)

REGULATIONS PURSUANT TO THE *CANADIAN ENVIRONMENTAL ASSESSMENT ACT*

Comprehensive Study List Regulations
Exclusion List Regulations
Federal Authorities Regulations
Inclusion List Regulations
Law List Regulations
Projects outside Canada Environmental Assessment Regulations
Regulations Respecting the Co-ordination by Federal Authorities of Environmental Assessment Procedures and Requirements
Canada Port Authority Environmental Assessment Regulations

REGULATIONS PURSUANT TO THE *CANADA LABOUR CODE,* PART II

Canada Occupational Health and Safety Regulations
Oil and Gas Occupational Safety and Health Regulations
Safety and Health Committees and Representatives Regulations

REGULATIONS PURSUANT TO THE *MACKENZIE VALLEY RESOURCE MANAGEMENT ACT*

Exemption List Regulations
Mackenzie Valley Land Use Regulations
Preliminary Screening Requirement Regulations

REGULATIONS PURSUANT TO THE *NORTHERN PIPELINE ACT*

Northern Pipeline Notice of Objection Regulations
Northern Pipeline Socio-Economic and Environmental Terms and Conditions for Northern British Columbia
Northern Pipeline Socio-Economic and Environmental Terms and Conditions for the Province of Alberta
Northern Pipeline Socio-Economic and Environmental Terms and Conditions for the Province of Saskatchewan
Northern Pipeline Socio-Economic and Environmental Terms and Conditions for Southern British Columbia
Northern Pipeline Socio-Economic and Environmental Terms and Conditions for the Swift River Portion of the Pipeline in the Province of British Columbia
Order Designating the Minister of Natural Resources as Minister for Purposes of the Act
Transfer of Duties, in Relation to the Pipeline, of Certain Ministers under Certain Acts to the Member of the Queen's Privy Council for Canada Designated as Minister for Purposes of the Act
Transfer of Duties, in Relation to the Pipeline, of the National Energy Board under Parts I, II and III of the *Gas Pipeline Regulations* to the Designated Minister for Purposes of the Act
Transfer of Powers, Duties and Functions (Kluane National Park Reserve Lands) Order Transfer of Powers, Duties and Functions (Territorial Lands) Order

COMPANIES WITH FACILITIES OR ACTIVITIES REGULATED BY THE NEB

The following pipeline companies and electric power entities construct or operate interprovincial or international pipelines or power lines under the NEB's jurisdiction, as of 31 December 2005. The pipeline companies have been divided into two groups. Group 1 gas and oil pipelines are the major pipeline companies subject to active regulatory oversight by the NEB. Group 2 consists of all other pipeline companies under the NEB's jurisdiction. For purposes of cost recovery, there are three classifications for companies: large, intermediate and small. The criteria for determining a company's classification are based on its size, throughput and cost of service.

Group 1 Gas Pipelines

Alliance Pipeline Ltd.
Foothills Pipe Lines Ltd.
Gazoduc Trans Québec & Maritimes Inc.
Maritimes & Northeast Pipeline Management Ltd.
TransCanada PipeLines Limited
TransCanada PipeLines Limited, B.C. System
Westcoast Energy Inc.

Group 1 Oil and Products Pipelines

Cochin Pipe Lines Ltd.
Enbridge Pipelines Inc.
Enbridge Pipelines (NW) Inc.
Terasen Pipelines (Trans Mountain) Inc.
Trans-Northern Pipelines Inc.

Group 2 Gas Pipelines

AltaGas Pipeline Partnership
AltaGas Suffield Pipeline Inc.
AltaGas Transmission Ltd.
Apache Canada Ltd.
ARC Resources Ltd.
Bear Paw Processing Company (Canada) Ltd.
BP Canada Energy Company
Canadian Hunter Exploration Ltd.
Canadian Natural Resources Limited
Canadian-Montana Pipe Line Corporation
Centra Transmission Holdings Inc.
Champion Pipeline Corporation Limited
Chief Mountain Gas Co-op Ltd.
DEFS Canada L.P.

Devon Energy Canada Corporation
Echoex Energy Inc.
EnCana Border Pipelines Limited
EnCana Ekwan Pipeline Inc.
EnCana Oil & Gas Co. Ltd.
EnCana Oil & Gas Partnership
EnCana West Ltd.
ExxonMobil Canada Properties
Forty Mile Gas Co-op Ltd.
Huntingdon International Pipeline Corporation
Husky Oil Operations Ltd.
KEYERA Energy Ltd.
Many Islands Pipe Lines (Canada) Limited
Mid-Continent Pipelines Limited
Minell Pipeline Limited
Murphy Canada Exploration Company
Murphy Oil Company Ltd.
Nexen Inc.
Niagara Gas Transmission Limited
Northstar Energy Corporation
Omimex Canada, Ltd.
Paramount Transmission Ltd.
Peace River Transmission Company Limited
Pengrowth Corporation
Penn West Petroleum Ltd.
Petrovera Resources Ltd.
Pioneer Natural Resources Canada Inc.
Portal Municipal Gas Company Canada Inc.
Prairie Schooner Limited Partnership
Profico Energy Management Ltd.
Regent Resources Ltd.
Renaissance Energy Ltd.
St. Clair Pipelines Management Inc.
Samson Canada, Ltd.
Shiha Energy Transmission Ltd.
Sierra Production Company
Suncor Energy Inc.
Taurus Exploration Canada Ltd.
Union Gas Limited
Vector Pipeline Limited Partnership
County of Vermilion River No. 24 Gas Utility
2193914 Canada Limited
806026 Alberta Ltd.
1057533 Alberta Ltd.

Group 2 Oil and Products Pipelines

Amoco Canada Petroleum Company Ltd.
Aurora Pipe Line Company
Berens Energy Ltd.
BP Canada Energy Company
Dome Kerrobert Pipeline Ltd.
Dome NGL Pipeline Ltd.
Duke Energy Empress L.P.
Enbridge Pipelines (Westspur) Inc.
Ethane Shippers Joint Venture
Express Pipeline Limited Partnership
Genesis Pipeline Canada Ltd.
Glencoe Resources Ltd.
Husky Oil Limited
Imperial Oil Resources Limited
ISH Energy Ltd.
Montreal Pipe Line Limited
Murphy Oil Company Ltd.
NOVA Chemicals (Canada) Ltd.
PanCanadian Kerrobert Pipeline Ltd.
Paramount Transmission Ltd.
Penn West Petroleum Ltd.
Plains Marketing Canada, L.P.
PMC (Nova Scotia) Company
Pouce Coupé Pipe Line Ltd., as agent and general partner of the Pembina North Limited Partnership
PrimeWest Energy Inc.
Provident Energy Pipeline Inc.
Renaissance Energy Ltd.
SCL Pipeline Inc.
Shell Canada Products
Shell Canada Products Limited
Sun-Canadian Pipe Line Company
Taurus Exploration Canada Ltd.
Yukon Pipelines Limited
1057533 Alberta Ltd.

Commodity Pipelines

Abitibi-Consolidated Company of Canada
E.B. Eddy Forest Products Ltd.
Fraser Papers Inc. (Canada)
Genesis Pipeline Canada Ltd.
Penn West Petroleum Ltd.
Souris Valley Pipeline Limited

Electric Power Companies

Abitibi-Consolidated Inc.
Advantage Energy, Inc.
ALLETE, Inc. d/b/a Minnesota Power
ATCO Power Canada Ltd. and Alberta Power (2000) Ltd.
Avista Energy, Inc.
Black Oak Capital, LLC.
BP Canada Energy Company
Brascan Energy Marketing Inc.
British Columbia Hydro and Power Authority
Calpine Energy Services Canada Ltd.
Canadian Transit Company
Candela Energy Corporation
Cargill Energy Trading Canada, Inc.
Cedars Rapids Transmission Co.
Chandler Energy Inc.
Cincinnati Gas & Electric Company
Citadel Financial Products S.a.r.l.
CMS Energy Resource Management Company
Columbia Power Corporation
Conectiv Energy Supply Inc.
Constellation Energy Commodities Group, Inc.
Constellation NewEnergy, Inc.
Consumers Energy Company
Coral Energy Canada Inc.
Detroit and Windsor Subway Company
Detroit Edison Company
Direct Commodities Trading (DCT) Inc.
Direct Energy Marketing Inc.
DTE Energy Trading, Inc.
Duke Energy Marketing Canada Corp.
Duke Energy Marketing Canada Ltd.
Dynegy Power Marketing, Inc.
Edison Mission Marketing & Trading, Inc.
Emera Energy Inc.
EnCana Energy Services Inc.
Engage Energy Canada, L.P.
Engage Energy US, L.P.
Enmax Energy Marketing Inc.
EPCOR Merchant and Capital Inc.
Exelon Generation Company, LLC
FortisAlberta
FortisBC Inc.
FortisOntario Inc.
Fraser Paper Inc. (Canada)
Hydro One Networks Inc.
Hydro-Québec
Independent Electricity Market Operator
Inland Pacific Energy Services Ltd.
Lighthouse Energy Trading Company, Inc.
MAG Energy Solutions Inc.
Manitoba Hydro-Electric Board
Marketing D'Énergie HQ Inc.
Merrill Lynch Commodities Canada, ULC
Merrill Lynch Commodities, Inc.
Mirant Americas Energy Marketing, L.P.
Montenay Inc.
MontWegan International Energia Resorce Inc.
Morgan Stanley Capital Group Inc.
New Brunswick Power Generation Corporation
New York Power Authority
Nexen Marketing
Northern States Power Company
NorthPoint Energy Solutions Inc.
Nova Scotia Power Inc.
NRG Power Marketing, Inc.
OGE Energy Resources, Inc.
Ontario Power Generation Inc.
Ontario Power Generation Inc./Ontario Power Interconnected Markets Inc.
PG&E Energy Trading - Power L.P.
Powerex Corp.
PPL EnergyPlus, LLC
Public Service Company of Colorado
Rainbow Energy Marketing Corporation
Reliant Energy Services Canada, Ltd.
Saracen Merchant Energy, LP
Saskatchewan Power Corporation
Sempra Energy Trading Corp.

SESCO Enterprises Canada Ltd.
Silverhill Ltd.
Sonat Power Marketing Inc. and Sonat Power Marketing L.P.
Split Rock Energy LLC
St. Clair Tunnel Company
SUEZ Energy International
Teck Cominco Metals Ltd.
TransAlta Energy Marketing Corp. and TransAlta Energy Marketing (U.S.) Inc.
TransCanada Energy Ltd.
TransCanada Power Marketing Inc.
UBS AG, London Branch
USGen New England Inc.
Williams Energy Marketing & Trading Canada, Inc.
WPS Canada Generation, Inc.
WPS Energy Services, Inc.

INFORMATION BULLETINS

The Board publishes information bulletins on the subjects listed below:

- The Public Hearing Process
- How to Participate in a Public Hearing
- Traffic, Tolls and Tariffs
- Electricity
- Protection of the Environment
- Pipeline Tolls and Tariffs: A Compendium of Terms
- Pipeline Safety

The Board also publishes the following brochures and booklets:

- Living and Working Near Pipelines – Landowner Guide, 2005
- Excavation and Construction near Pipelines, January 2002
- A Proposed Pipeline or Power Line Project: What you need to know, 2004
- Frontier Lands: released information: geophysical/geological, ESRF, well histories: Information for the Public, June 2005

INFORMATION SERIES

The Board publishes the following information series:

- Answers to your Questions about the National Energy Board
- Library and Information Services
- Frontier Information Office
- Pipeline Regulation in Canada: A Guide for Landowners and the Public, June 2003
- Regulation of Commodity Pipelines
- Service Standards

VIDEOS

In the Public Interest is a general video about the roles and responsibilities of the NEB.

The Public Hearing Process is an educational video about the hearing process.

MAJOR DOCUMENTS PUBLISHED IN 2005

International Power Lines

New Brunswick Power Transmission Corporation
Detailed Route hearing for electricity certificate EC-111-25
MH-1-2005
Reasons for Decision, June 2005
New Brunswick Power Transmission Corporation

Tolls and Tariffs

Enbridge Pipelines Inc.
Orders pursuant to Part IV of the NEB Act
RH-1-2005
Decision, 28 April 2005

TransCanada Pipelines Limited
2004 mainline tolls and tariff, Phase II
RH-2-2004
Reasons for Decision, April 2005

Canadian Association of Petroleum Producers
Review of Board Decision RH-2-2004 Phase I
RH-R-1-2005
Reasons for Decision, May 2005

Coral Energy Canada Inc. and the Cogenerators Alliance
Review of Board decision RH-2-2004, Phase I
RH-R-2-2005
Reasons for Decision, May 2005

Enbridge Pipelines Inc.
Orders pursuant to Part IV of the NEB Act
RH-1-2005
Reasons for Decision, June 2005

Westcoast Energy Inc.
Certain firm service enhancements in zones 3 and 4
RHW-1-2005
Reasons for Decision, November 2005

Electricity

Constellation NewEnergy, Inc.
Electricity export permits EPE-264, EPE-265
Letter Decision, 29 April 2005

Calpine Energy Services Canada Ltd.
Electricity export permits EPE-266, EPE-267
Letter Decision, 27 May 2005

Manitoba Hydro
Electricity export permit EPE-273
Letter Decision, 6 June 2005

TransCanada Energy Ltd.
Electricity export permits EPE-270, EPE-271
Letter Decision, 17 June 2005

Lighthouse Energy Trading Company, Inc.
Electricity export permits EPE-272, EPE-274
Letter Decision, 15 July 2005

ENMAX Energy Marketing Inc.
Electricity export permits EPE-277, EPE-278
Letter Decision, 7 October 2005

Manitoba Hydro
Electricity export permits EPE-268, EPE-269
Letter Decision, 27 October 2005

Other documents

National Energy Board Annual Report Pursuant to the *Access to Information Act* and the *Privacy Act* - 1 April 2004 – 31 March 2005 (June 2005)

National Energy Board 2005-2006 Estimates – Part III – Report on Plans and Priorities

National Energy Board 2004 Annual Report to Parliament (March 2005)

National Energy Board Performance Report for the period ending March 31, 2005

Regulatory Agenda, 12 Issues, 31 January 2005 to 31 December 2005

Alberta's Ultimate Potential for Conventional Natural Gas, March 2005

Focus on Safety and Environment: a Comparative Analysis of Pipeline Performance, 2000-2003, March 2005

Outlook for Electricity Markets 2005-2006, June 2005

Service Standards, July 2005

Canadian Hydrocarbon Transportation System, August 2005

Short-term Outlook for Canadian Crude Oil to 2006, September 2005

Short-term Canadian Natural Gas Deliverability, 2005-2007, October 2005

Short-term Outlook for Natural Gas and Natural Gas Liquids to 2006, October 2005

National Energy Board Regulatory Improvement Workshop, 8 November 2004

National Energy Board Electricity Cost Recovery Workshop: Summary of Workshop Discussion, Delta Bow Valley Hotel, Calgary, Alberta, 9 December 2004

National Energy Board Electricity Cost Recovery Workshop: Summary of Workshop Discussion, Fairmont Queen Elizabeth Hotel, Montreal, Quebec, 2 June 2005

National Energy Board Workshop 2005: Collaborating for Regulatory Improvement, June 6–8, 2005

The Northern Gas Project Secretariat and National Energy Board Traditional Knowledge Workshop: Traditional Knowledge in the National Energy Board's Regulatory Process – Participant Binder, Calgary, Alberta, June 16–17, 2005

SUPPLEMENT IV

LEGAL PROCEEDINGS 2005

Appeals and Reviews

1. Sumas Energy 2, Inc. (SE2) – Appeal of Board Decision EH-1-2000 – Federal Court of Appeal

On 2 April 2004, SE2 applied to the Federal Court of Appeal for leave to appeal the Board's 4 March 2004 Decision to deny an application from SE2 to construct the Canadian portion of an international power line. The line would originate at the United States border near Sumas, Washington and end at a BC Hydro substation in Abbotsford, British Columbia. Leave was granted on 26 July 2004 and a Notice of Appeal was filed on 10 September 2004. The matter was heard by the Court from 7 November 2005 to 9 November 2005.

Decision: On 9 November 2005, the Federal Court of Appeal dismissed SE2's appeal.

2. Canadian Association of Petroleum Producers (CAPP) – Review of Reasons for Decision RH-2-2004, Phase I – TransCanada Pipelines Limited (TCPL) 2004 Tolls (RH-R-1-2005)

On 12 November 2004, CAPP applied for a review of the Board's RH-2-2004, Phase I Decision concerning TCPL's 2004 Mainline Tolls. CAPP stated that the Board committed certain errors that raised a doubt as to the correctness of its decision.

Decision: With respect to regulatory costs, the Board was of the view that CAPP has not raised a doubt as to the correctness of the Phase I Decision.

CAPP withdrew the long-term incentive compensations costs (LTIC); therefore, the Board was of the view that no further consideration was required.

The Board heard oral argument with respect to the Phase I Decision authorizing Firm Transportation Service – Non-Renewable (FT-NR) to be tolled on a biddable basis. This decision was overturned. The Board found that FT-NR service is to be tolled using the same methodology as for FT with a step-down.

3. Coral Energy Canada Inc. and the Cogenerators Alliance – Application to Review Board Decision RH-2-2004 Phase I - TransCanada Pipelines Limited (TCPL) 2004 Tolls (RH-R-2-2005)

On 11 January 2005, Coral Energy Canada Inc. (Coral) and the Cogenerators Alliance (CA) applied for a review and variance of Board Decision RH-2-2004 Phase I on the grounds that the Board erred by inappropriately shifting the burden of proof onto intervenors and that this rendered incorrect the Board's decisions with respect to the waste heat agreements and Compressor Operating Agreement (collectively, the Agreements), and TransCanada's Operations, Maintenance and Administration costs (OM&A costs) and by failing to provide adequate reasons for its decisions.

Decision: The Board dismissed the Coral and CA application for review on the basis that no doubt as to the correctness of the Board's Decision had been raised.

4. Dene Thá First Nation – Application for judicial review

On 17 May 2005 the Dene Tha' First Nation brought an application for judicial review of the ongoing failure of the Minister of Environment, Minister of Fisheries and Oceans, Minister of Indian and Northern Affairs Canada and Minister of Transport to comply with their fiduciary and constitution duties under section 35 of the *Constitution Act, 1982*, to consult with and accommodate the Aboriginal and Treaty rights of the Dene Tha' First Nation in respect of the environmental and regulatory review of the Mackenzie Gas Project. The Application also requested a number of declarations including a declaration that the Mackenzie Gas Project and proposed facilities to be built by Nova Gas Transmissions Limited to connect to the Mackenzie Valley Pipeline are a single federal work or undertaking within the meaning of section 92(10)(a) of the *Constitution Act, 1867*. Imperial Oil Resources Ventures Limited, the National Energy Board and Members of the Joint Review Panel were also named as respondents. No relief was requested from the National Energy Board.

Decision: By Federal Court Order dated 27 June 2005, a Case Management Judge was appointed. At a Case Management Conference held in Calgary, Alberta on 16 November 2005 a procedure was developed to bring the matter to hearing in June 2006.

5. Flint Hills Resources, Ltd. – Application to Appeal the Board's Decision RH-1-2005, Enbridge Pipelines Inc.

On 25 May 2005, Flint Hills Resources, Ltd. applied to the Federal Court of Appeal for leave to appeal the Board's decision on the grounds that the Board erred by exceeding its jurisdiction in the approval of the Enbridge application. The Federal Court granted leave on 30 August 2005 and the company filed its Notice of Appeal on 28 October 2005.

Decision: The matter has not yet been set down for hearing by the Federal Court of Appeal.

SUPPLEMENT V

CO-OPERATION WITH OTHER ORGANIZATIONS

The NEB co-operates with other agencies to reduce regulatory overlap and provide more efficient regulatory services.

Alberta Energy and Utilities Board

The NEB has an MOU with the EUB on Pipeline Incident Response. The agreement provides for mutual assistance and a faster and more effective response by both Boards to pipeline incidents in Alberta.

The NEB and the EUB maintained their commitment to using the common reserves database for oil and gas reserves in Alberta. Both Boards are committed to developing more efficient methods for maintaining estimates of reserves and to exploring other opportunities for co-operation. In 2005, the Boards released the results of their assessment of Alberta's conventional natural gas resources (Energy Market Assessment: *Alberta's Ultimate Potential for Conventional Natural Gas*, March 2005. Available at NEB Library).

Atlantic Memorandum of Understanding on concurrent offshore Environmental Assessment

On 18 February 2005, the Government of Canada (represented by various federal departments), the Government of Nova Scotia, the NEB, and the C-NSOPB signed an MOU to create a more coordinated and integrated EA and regulatory process for Nova Scotia offshore petroleum development. The work of the NEB and the other signatories to the agreement was coordinated through the Atlantic Energy Roundtable. The full name of the agreement is "Memorandum of Understanding on Effective, Coordinated and Concurrent Environmental Assessment and Regulatory Processes for Offshore Petroleum Development Projects in the Nova Scotia Offshore Area".

British Columbia Ministry of Energy and Mines

The NEB and British Columbia Ministry of Energy and Mines maintained their commitment to using a common reserves database for oil and gas reserves in British Columbia. Both Boards are committed to developing more efficient methods for maintaining estimates of reserves and to exploring other opportunities for co-operation. Currently the Boards are working on a new assessment of gas resources in British Columbia.

Canada Newfoundland Offshore Petroleum Board and Canada Nova Scotia Offshore Petroleum Board

The Chairs of the NEB, the C-NOPB and the C-NSOPB, together with executives from the Newfoundland, Labrador and Nova Scotia Departments of Energy and NRCan, form the Oil and Gas Administrators Advisory Council (OGAAC). The OGAAC membership discuss and decide on horizontal issues affecting their respective organizations to ensure convergence and collaboration on oil and gas exploration and production issues across Canada. The NEB, C-NOPB and C-NSOPB staff also work together to review, update and amend regulations and guidelines affecting oil and gas activities on accord lands.

NEB staff also provide technical expertise to NRCan, C-NOPB and C-NSOPB on technical matters of mutual interest, such as reservoir assessment, occupational safety and health, diving, drilling and production activities.

In 2002, the NEB and C-NSOPB signed an MOU to coordinate the regulatory review of the EnCana Deep Panuke Offshore Gas Development project.

Canadian Association of Members of Public Utility Tribunals

The Canadian Association of Members of Public Utility Tribunals (CAMPUT) is a non-profit organization of federal, provincial and territorial boards and commissions responsible for regulating electric, water, gas and pipeline utilities in Canada. Members sit on the executive committee of the association and promote education and training of members and staff of public utility tribunals. The NEB also provides information to CAMPUT and staff support for conference organization. During 2005, the NEB participated in the CAMPUT annual meeting in Saskatoon, Saskatchewan.

Canadian Environmental Assessment Agency

NEB staff are actively engaged with Canadian Environmental Assessment Agency (CEAA) matters, participating in CEAA's Senior Management Committee and acting as an observer on the Regulatory Advisory Committee. This involvement ensures effective coordination of regulatory responsibilities relating to environmental assessments.

Co-operation on the Environmental Impact Assessment and Regulatory Review of a Northern Gas Pipeline Project through the Northwest Territories

In 2002, the NEB, in collaboration with the boards and agencies responsible for environmental impact assessment and regulatory review of a major natural gas pipeline through the Northwest Territories, issued a co-operation plan. This plan describes how the agencies propose to coordinate their activities to ensure an efficient, flexible and timely process that reduces duplication and enhances public and northern participation in the review of a major pipeline application. The NEB's partners in the plan include the Mackenzie Valley Land and Water Board, the Sahtu and Gwich'in Land and Water Boards, the NWT Water Board, the Mackenzie Valley Environmental Impact Review Board, the Environmental Impact Screening Committee and the Environmental Impact Review Board for the Inuvialuit Settlement Region, the Inuvialuit Game Council, the Inuvialuit Land Administration, CEAA, INAC, and observers from the Deh Cho First Nation, the Government of the Northwest Territories, and the Government of Yukon.

Human Resources and Skills Development Canada

The NEB has an MOU with HRSDC to administer Part II of the *Canada Labour Code* for NEB-regulated facilities and activities and to coordinate these safety responsibilities under the COGO Act and the NEB Act. The NEB also participates in the HRSDC client satisfaction survey.

Memorandum of Understanding between the National Energy Board and U.S Federal Energy Regulatory Commission

The NEB and FERC recognize that the conduct of their responsibilities may require them to examine, regulate, or otherwise oversee interconnecting facilities or activities. In this regard both regulatory agencies recognize that appropriate coordination of efforts could promote the public interest through increased efficiency, expedited and

coordinated action on energy infrastructure projects and cost savings to both the public and regulated entities. When either agency becomes aware of a proceeding before it that may involve the other, it will notify the agency accordingly.

The agreement is in effect until 2014 unless reviewed or renewed by mutual consent.

Natural Resources Canada

In 1996, the NEB signed an MOU with NRCan to reduce duplication and increase co-operation between the agencies. This MOU covers activities such as data collection, the enhancement of energy models and special studies. The MOU was renewed in January 2000, but has since expired and a renewal is being drafted. The 1992 MOU with NRCan transfers responsibilities for administering aspects of the COGO Act and CPR Act to the NEB.

NEB and Mackenzie Valley Environmental Impact Review Board Memorandum of Understanding on Co-operative Environmental Assessment

On 23 September 2005 in Calgary, the Chairs of the NEB and the Mackenzie Valley Environmental Impact Review Board (MVEIRB) renewed an MOU on co-operative EA of NEB-regulated energy projects in the Mackenzie Valley of the Northwest Territories.

Pipeline Technical Regulatory Authorities of Canada Council

The NEB chairs a staff committee of federal and provincial technical regulators. The Pipeline Technical Regulatory Authorities of Canada Council meets regularly throughout the year to discuss pipeline safety and environmental initiatives.

Transportation Safety Board of Canada

While the NEB has exclusive responsibility for regulating the safety of oil and gas pipelines under federal jurisdiction, it shares the responsibility for investigating pipeline incidents with the Transportation Safety Board of Canada. An MOU is in place outlining the roles and responsibilities of the Boards.

U.S. Federal Energy Regulatory Commission and Comisión Reguladora de Energía of Mexico

The NEB, FERC and the Comisión Reguladora de Energía of Mexico (CRE) have a tri-lateral agreement to share information on regulatory approaches and current events, and seek to provide compatible regulatory approaches while respecting each country's legislative mandates to act in the best interest of their respective nation.

It is the intent of the three regulatory agencies to meet three times a year to promote regular exchanges of information and management approaches to enable best practices in each countries respective regulatory and internal management approaches.

United States National Association of Regulatory Utility Commissioners

Board Members regularly participate in meetings of the U.S. National Association of Regulatory Utility Commissioners, particularly with respect to developments in U.S. gas markets that may affect cross border trade in natural gas.

Yukon Territory Department of Economic Development

The NEB continues to work with Yukon officials to transfer oil and gas regulatory responsibilities per the Yukon Accord Implementation Agreement. The Board provides expert technical advice to the Yukon Territory Department of Economic Development. The NEB and the Government of Yukon signed a services agreement 6 April 2004.

LIST OF APPENDICES

The following statistical reports are published separately as **Appendices to the NEB Annual Report**. Electronic copies can be found at www.neb-one.gc.ca and printed versions are available from the Publications Office by calling (403) 299-3562 or 1-800-899-1265, or by sending a facsimile to (403) 292-5503 or 1-877-288-8803.

Appendix A – Conventional Energy Supply and Disposition Reports

- A1 Crude Oil and Equivalent Supply and Disposition
- A2 Estimated Established Reserves of Crude Oil and Bitumen as of 31 December 2004
- A3 Natural Gas Supply and Disposition
- A4 Estimated Established Reserves of Marketable Natural Gas as of 31 December 2004
- A5 Natural Gas Liquids Supply and Disposition
- A6 Geophysical Activity
- A7 Exploration and Development Expenditures
- A8 Sales of Exploration Rights in Western Canada
- A9 Sales of Exploration Rights in Frontier Regions
- A10 Electricity Generation and Disposition

Appendix B – Certificates, Orders and Licences for Oil Pipelines and Exports

- B1 Certificates Issued During 2005 Approving Oil Pipeline Facilities Including Pipeline Construction Exceeding 40 Kilometres in Length
- B2 Orders Issued During 2005 Approving Oil Pipeline Facilities Including Pipeline Construction Not Exceeding 40 Kilometres in Length
- B3 Exports of Canadian Crude Oil and Equivalent – 2004 and 2005
- B4 Exports of Canadian Crude Oil and Equivalent – 2001 to 2005
- B5 Exports of Petroleum Products by Month – 2005
- B6 Exports of Petroleum Products by Company – 2004 and 2005

Appendix C – Certificates, Orders and Licences for Gas Pipelines and Exports

C1 Certificates Issued During 2005 Approving the Construction of Gas Pipeline Facilities Exceeding 40 Kilometres in Length

C2 Orders Issued During 2005 Approving the Construction of Gas Pipeline Facilities Not Exceeding 40 Kilometres in Length

C3 Licences and Long-Term Orders to Export Natural Gas as of 31 December 2005

C4 Licences and Long-Term Orders to Import Natural Gas as of 31 December 2005

C5 Natural Gas Exports by Export Point – 2001 to 2005

C6 Total Net Exports of Propane and Butanes – 2004 and 2005

Appendix D – Financial Information for Group 1 Oil and Gas Pipeline Companies

D1 Financial Information – Group 1 Oil Pipeline Companies with Multi-Year Incentive Toll Agreements

D2 Financial Information – Group 1 Oil Pipeline Companies with Tolls based on Cost of Service

D3 Financial Information – Group 1 Gas Pipeline Companies

Appendix E – Certificates, Orders and Licences for Power Lines and Electricity Exports

E1 Certificates and Permits Issued During 2005 for International Power Lines

E2 Amending Orders Issued During 2005 for International Power Lines

E3 Revoking Orders Issued During 2005 for International Power Lines

E4 Licences Issued During 2005 for the Export of Electricity

E5 Permits and Orders Issued During 2005 for the Export of Electricity

E6 Electricity Exports – 2005

E7 Electricity Trade between Canada and the United States – 2005 (by Province)

E8 Electricity Trade between the United States and Canada – 2005 (by American Region/State)

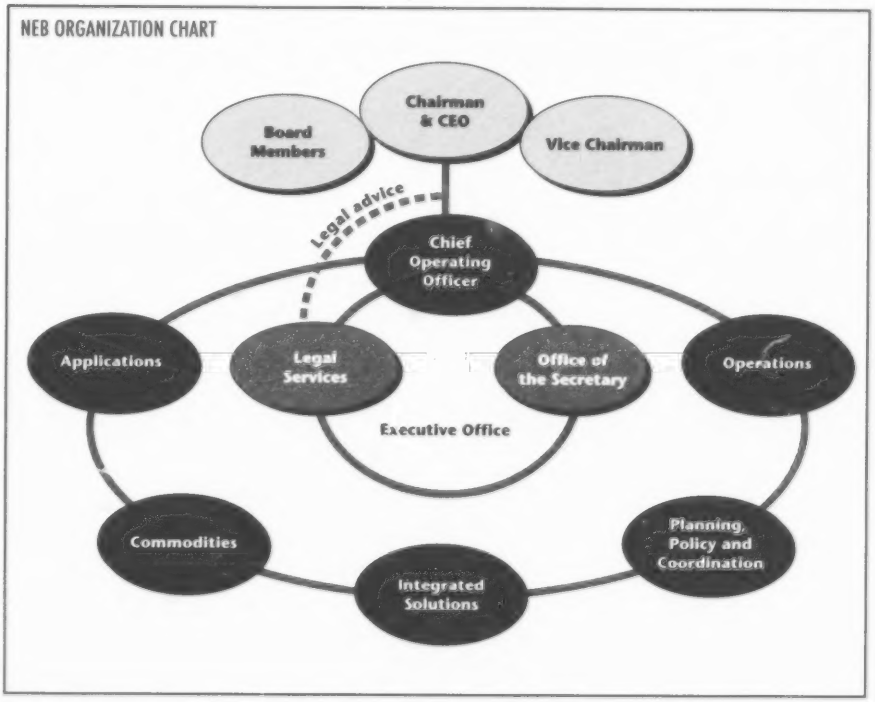
NEB ORGANIZATION

The NEB is structured into five business units, reflecting major areas of responsibility:

- Applications;
- Operations;
- Commodities;
- Integrated Solutions; and
- Planning, Policy and Coordination.

In addition, the Executive Office includes two other teams providing specialized services:

- Legal Services; and
- Regulatory Services.



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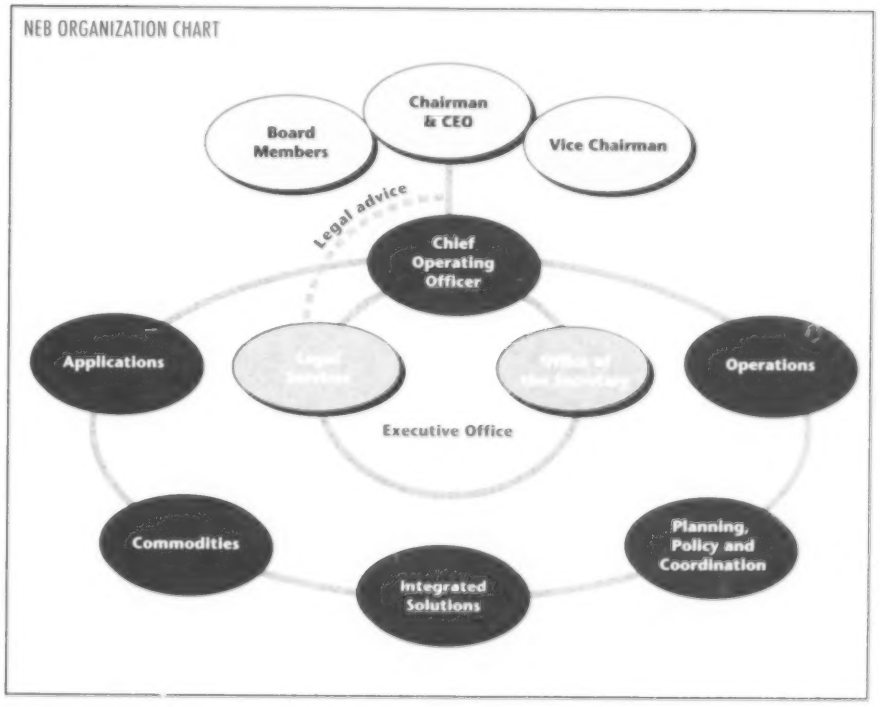

SENIOR BOARD STAFF

Jim Donihee, Chief Operating Officer

Kathleen Beall, General Counsel

Michel Mantha, Secretary of the Board

Sandy Harrison, Business Leader, Applications

John McCarthy, Business Leader, Commodities

Valerie Katarey, Business Leader, Integrated Solutions

Gregory Lever, Business Leader, Operations

Brenda Kenny, Business Leader, Planning, Policy and Coordination

Bonnie Gray, Project Leader, Northern Preparedness

Glenn Booth, Professional Leader, Economics

Alan Murray, Professional Leader, Engineering

Robert Steedman, Professional Leader, Environment

Charlotte Holmlund, Knowledge Exchange Officer

BUSINESS UNIT RESPONSIBILITIES

Applications

The Applications Business Unit is responsible for processing and assessing most regulatory applications submitted under the NEB Act. These fall primarily under Parts III and IV of the Act and correspond to facilities and tolls and tariffs applications and to construction and operation of international and interprovincial electric power lines. The Applications Business Unit is also responsible for other matters such as the financial surveillance and financial audits of companies under the Board's jurisdiction and for addressing landowner concerns.

Commodities

The Commodities Business Unit is responsible for energy industry and marketplace surveillance, including the outlook for the demand and supply of energy commodities in Canada, updating guidelines, and developing regulations relating to energy exports as prescribed by Part VI of the NEB Act. It is also responsible for assessing and processing applications for oil, natural gas and electricity exports.

Operations

The Operations Business Unit is accountable for safety and environmental matters pertaining to facilities under the NEB Act, the COGO Act and the CPR Act. It conducts safety and environmental inspections and audits; investigates incidents; monitors emergency response procedures; regulates the exploration, development and production of hydrocarbon resources in non-accord frontier lands; and develops related safety and environment regulations and guidelines.

Integrated Solutions

Integrated Solutions is responsible, in partnership with clients, for developing, implementing and supporting strategies and solutions to enhance business outcomes. Included in this responsibility are the areas of people, information management, finances and assets. The Integrated Solutions Business Unit includes Board-wide computer systems and services, materiel and facilities management, contracting, library services, corporate records management, financial management, human resource management, translation, and document design and production.

Planning, Policy and Coordination

The Planning, Policy and Coordination Business Unit is responsible for developing the NEB's long-term regulatory framework and regulatory tools and for organization-wide planning and coordination. The Unit provides communication, engagement (general and Aboriginal), and appropriate dispute resolution services to the Board. It also supports the Board's ongoing technical excellence through its professional leader and knowledge network services.

Executive Office

The Executive Office is responsible for the Board's overall capability and readiness to meet strategic and operational requirements including providing legal advice for regulatory and management purposes; and administering hearings; and providing regulatory support.

LIST OF ABBREVIATIONS

ADR	appropriate dispute resolution
AVC	Assurance of Voluntary Compliance
BAPE	Québec Bureau d'audiences publiques sur l'environnement
BC Hydro	British Columbia Hydro and Power Authority
Board	National Energy Board
C-NOPB	Canada-Newfoundland Offshore Petroleum Board
C-NSOPB	Canada-Nova Scotia Offshore Petroleum Board
CAP	Corrective Action Plan
CAPP	Canadian Association of Petroleum Producers
CEA Act	Canadian Environmental Assessment Act
CEAA	Canadian Environmental Assessment Agency
COGO Act	Canadian Oil and Gas Operations Act
CPPLC	ConocoPhillips Pipe Line Company
CPR Act	Canada Petroleum Resources Act
CSA	Canadian Standards Association
CTS	Commodities Tracking System
Devon	Devon Canada Corporation
EA	environmental assessment
EMA	Energy Market Assessment
Enbridge	Enbridge Pipelines Inc.
ERO	Electric Reliability Organization
ESIMS	Environmental and safety information management system
ESRF	Environmental Studies Research Fund
EUB	Alberta Energy and Utilities Board
FERC	Federal Energy Regulatory Commission
GDP	Gross Domestic Product
GHG	greenhouse gases
GIS	Geographic Information System
HQ	Hydro-Québec
HRSDC	Human Resources and Skills Development Canada

HSE	health, safety and environment
IMP	integrity management program
INAC	Indian and Northern Affairs Canada
IORVL	Imperial Oil Resources Ventures Limited
km	kilometre
kV	kilovolt
LNG	liquefied natural gas
m3	cubic metre
m3/d	cubic metres per day
MISO	Midwest Independent System Operator
mm	millimetre
MOU	Memorandum of Understanding
MW	megawatt
NEB or Board	National Energy Board
NEB Act	National Energy Board Act
NGC	natural gas from coal
NGLs	natural gas liquids
NGPS	Northern Gas Project Secretariat
NRCan	Natural Resources Canada
NBSO	New Brunswick System Operator
NSPI	Nova Scotia Power Inc.
O&M	operation and maintenance
OPA	Ontario Power Authority
OPEC	Organization of Petroleum Exporting Countries
OPR-99	Onshore Pipeline Regulations, 1999
PSEA	Public Service Employment Act
PSMA	Pipeline Security Management Assessment
Régie	Régie de l'énergie
RFP	requests for proposal
RTO	regional transmission organization
Sea Breeze	Sea Breeze Power Corp.
TransCanada	TransCanada PipeLines Limited
TSB	Transportation Safety Board of Canada
TPTM	Terasen Pipelines (Trans Mountain)
TWh	Terawatt hour
WCSB	Western Canada Sedimentary Basin
Westcoast	Westcoast Energy Inc.
WTI	West Texas Intermediate

METRIC CONVERSION TABLE

The Board uses the International System of Units. The energy content of a 30-litre tank of gasoline is approximately one gigajoule. A petajoule is one million gigajoules. On average, Canada consumes about one petajoule of energy every 50 minutes for all uses (heat, light and transportation).

The following conversion table is provided for the convenience of readers who may be more familiar with the Imperial System.

APPROXIMATE CONVERSION FACTORS

metre	=	3.28 feet
kilometre	=	0.62 mile
hectare	=	2.47 acres
cubic metre of oil	=	6.3 barrels
cubic metre of natural gas	=	35.3 cubic feet
gigajoule	=	0.95 thousand cubic feet of natural gas at 1 000 Btu per cubic foot or 0.165 barrels of oil, or 0.28 megawatt hours of electricity
gigajoule	=	10^9 joules
petajoule	=	10^{15} joules
gigawatt hour	=	10^6 kilowatt hours
terawatt hour	=	10^9 kilowatt hours